07-0149
SDMS 201073

U.S. Army Corps of Engineers

New England District
Concord, Massachusetts

Determination of Final Remediation Limits Elm Street Bridge to Dawes Avenue Bridge 1.5 Mile Reach Removal Action

DCN: GE-102703-ABWA

October 2003

Environmental Remediation Contract General Electric (GE)/Housatonic River Project Pittsfield, Massachusetts

Contract No. DACW33-00-D-0006

Task Order No. 0005

02M-0140

WESTON SOLUTIONS

United States Environmental Protection Agency
EPA New England
One Congress Street, Suite 1100
Boston, MA 02114-2023

October 30, 2003

To: J. Kilborn, EPA (w/o enclosure)
B. Olson, EPA (w/o enclosure)
H. Inglis
S. Streenstrup, MA DEP (2 copies)
Sue Peterson, CT DEP
Dale Young, MA EOEA
A. Silfer, GE
R. Cataldo, ENSR
R. Nasman, The Berkshire Gas Company (w/o enclosure)
Public Information Repositories

RE: Remediation Limits – Elm Street Bridge to Dawes Avenue Bridge
1.5 Mile Reach Removal Action
GE-Pittsfield/Housatonic River Site, Pittsfield, Massachusetts

Enclosed please find the following report:

Determination of Final Remediation Limits, Elm Street Bridge to Dawes Avenue Bridge, 1.5 Mile Reach Removal Action (October 2003), by Weston Solutions

This report summarizes the additional PCB and non-PCB data collected in the 2002 supplemental sampling event and describes the evaluation process used to determine final remediation limits from the Elm Street Bridge to Dawes Avenue Bridge. The final remediation limits differ significantly from those presented in the Engineering Evaluation/Cost Analysis (EE/CA) and the summarized in the November 21, 2000 Action Memorandum for the 1.5 Mile Reach. These limits will be used in the design and implementation of the 1.5 Mile Reach Removal Action.

If you have any questions, please contact me at (413) 236-0969.

Sincerely,

Dean Tagliaferro

Dean Tagliaferro

Enclosure

Table of Contents

List of Tables

Title

List of Figures

Title

1. Introduction

This report has been prepared to present analytical results for soil samples collected along the riverbanks from the Elm Street Bridge downstream to the Dawes Avenue Bridge as a part of the investigation stage of the 2nd Phase of the 1.5 Mile Reach Removal Action of the Housatonic River in Pittsfield, Massachusetts. Field sampling activities associated with this investigation were conducted on March 25, 2002 through April 8, 2002. Included in this report is an analysis and evaluation of the new bank sample data in combination with existing/historical data. The results of the data analysis and evaluation are used to confirm, and in some cases modify remediation limits that were originally provided in the Engineering Evaluation/Cost Estimate (EE/CA) (07-0032) for the 1.5 Mile Reach Removal Action and finalized in EPA's November 21, 2000 Action Memorandum. This report includes the following sections:

- Purpose and Objectives
- Sampling Locations
- Field Sampling and Analytical Procedures
- Analytical Results
- Data Evaluation

The activities described in this memorandum were conducted in accordance with project-wide and area specific planning documents. These planning documents include the following:

- Work Plan Addendum (Sampling Plan), October 25, 2001
- Project Field Sampling Plan (00-0334)
- Project Health and Safety Plan (HASP) (00-0313)
- Project Quality Assurance Project Plan and Addendum (QAPP) (00-0305)
- Site Specific Health and Safety Plan (00-0475)

2. Purpose and Objectives

The purpose of the sampling investigation was to supplement existing riverbank soil data for the Elm Street Bridge to Dawes Avenue Bridge portion of the 1.5 Mile Reach in order to finalize the limit of remediation. The investigation had the following objectives:

1. Further assess PCB concentrations in riverbank soils at elevations above those previously sampled in order to determine whether the limit of remediation on the east and west bank between transects 108 - 150 could be lowered from its current location at the top of bank.

2. Further assess PCB concentrations at depths greater than three feet on residential parcels on the east riverbank downstream of the Elm Street Bridge. The cleanup level for depths greater than three feet on residential properties specified in the

EE/CA and Action Memorandum include a "not-to-exceed" PCB concentration of 50 ppm and an average concentration of PCBs of less than 10 ppm in bank soils from 3 to 15 feet deep.

3. Further assess Appendix IX Semivolatile Organic Compounds (SVOCs) at elevations above those previously sampled on the west riverbank between transects 114 – 130 and on the east riverbank at transect 110. Determine if remediation beyond that required to address PCBs is required in these areas.

3. Sampling Locations

A total of seventy-three sample locations were established to further characterize the PCB and Appendix IX SVOCs concentrations in the riverbanks from the Elm Street Bridge downstream to Dawes Avenue Bridge. However, in three sample locations complete refusal was met therefore giving a total of seventy locations sampled.

Sixty of the seventy-three sample locations were selected to correspond to existing transects 110 - 148 where previous sampling did not extend to the top of riverbank (EPA limit of remediation). These sample locations were spaced evenly between previous "upper bank" sample locations and the top of riverbank. The remaining thirteen sample locations were located on residential parcels on the east riverbank immediately downstream of the Elm Street Bridge. However, at three of these locations complete refusal was met and no samples were collected therefore giving a total of ten sample locations on the residential properties. All sample locations were surveyed for horizontal and vertical coordinates.

4. Field Sampling and Analytical Procedures

Soil sampling was conducted at the each of the locations as depicted on Figure 1 (maps 1 and 2). Sixty sample locations were sampled along existing transects 110 – 148 on both the east and west riverbank and sampled to a depth of three feet (with sample depths including 0-1, 1-2, and 2-3 feet). A total of ten locations were sampled on residential parcels on the east riverbank right downstream of the Elm Street Bridge. Three of the ten locations were selected to assess PCB concentrations at depths between 3 and 6 feet (with sample depths of 3-4, 4-5, and 5-6 feet). The remaining seven sample locations were on parcel I8-10-2 to further characterize the riverbank soil from 0-6 feet (with sample depths including 0-1, 1-2, 2-3, 3-4, 4-5, and 5-6 feet). This sampling was necessary since access for sampling could not be obtained on this residential property during the EE/CA sampling.

Sampling protocols were conducted in accordance with the WESTON Work Plan Addendum (October 25, 2001) and the WESTON Field Sampling Plan (30 July 2001) for soil sampling (C.32). All samples were analyzed for PCBs at a fixed, off site laboratory approved by the United States Army Corps of Engineers New England District. QA/QC

samples were obtained in accordance with the requirements outlined in the project QAPP and Addendum (00-03-05). WESTON conducted data management and data validation of sample analyses in accordance with the procedures outlined in the project QAPP. All analyses were found to meet the Level III data quality objectives as outlined in the project QAPP.

5. Analytical Results

A total of 204 samples were analyzed for Aroclors and Total PCBs and used in the data evaluation from the Spring 2002 sampling event. Twenty samples were analyzed for Appendix IX SVOCs parameters. In addition 362 Total PCB results and 12 Appendix IX SVOC results from existing sampling locations were used in the data evaluation. Tables showing the validated analytical results for all samples associated with this investigation and data evaluation have been attached to this report. (See Table 1 for all PCB results and Table 2 for the Appendix IX SVOC results.)

6. Data Evaluation

The November 21, 2000 Action Memorandum for the 1.5 Mile Reach states that riverbank soils adjacent to recreational or commercial properties are classified as recreational use exposure scenarios. The recreational use cleanup criteria is 10 parts per million (ppm) in the top three feet. The Action Memorandum further states that compliance with the 10 ppm cleanup criteria will be based on the 95% Upper Concentration Limit of the mean PCB concentration in riverbank soil. For properties classified as recreational, there is no remediation required for riverbank soil at depths greater than three feet.

For residential properties, the November 21, 2000 Action Memorandum specifies a cleanup level of 2 ppm in the top three feet, based on the 95% Upper Concentration Limit of the mean PCB concentration in riverbank soil. For residential properties, there are additional cleanup criteria. For depths from three to fifteen feet (and above the groundwater table) there is a not-to-exceed concentration of 50 ppm PCBs. Furthermore, the arithmetic average of the PCBs in soil from three to fifteen feet (and above the groundwater table) must be less than 10 ppm.

For the Elm Street to Dawes Avenue section of the 1.5 Mile Reach, the EE/CA classified four properties as residential and the remaining riverbank properties were classified as recreational. These four residential properties are located immediately downstream of the Elm Street Bridge on the east side of the river. Two out of the four are commercial properties that contain residential apartments above stores and the remaining two are typical residential properties. After the EE/CA and the 2002 supplemental sampling was completed, EPA reached an agreement with the homeowners of the two residential properties to permanently relocate. The houses will be demolished and the properties turned over to the City of Pittsfield. Therefore, the riverbank on these two properties

were reclassified as recreational areas. In addition, due to the extremely steep banks (one of which consists entirely of a timber retaining wall) on the two commercial properties with apartments, EPA determined that access to these banks is very limited and that a recreational exposure scenario is more appropriate. Therefore, all riverbank soil from Elm Street to Dawes Avenue is now considered "recreational" for the purpose of determining cleanup levels.

The first step in evaluating the data and finalizing remediation limits is to evaluate the PCB data and determine the remediation required to meet the PCB cleanup levels. After the remediation limits to address PCBs are determined, the next step is to evaluate the Appendix IX (non-PCB hazardous substances) contamination to determine if additional remediation is required. The Action Memorandum states that the evaluation of Appendix IX data will be performed in a similar approach to the one specified in the overall Consent Decree between General Electric, EPA and other governmental agencies.

Surficial PCB Evaluation: 0 – 3 Feet

To complete a final evaluation of the PCB concentrations in the banks from transect 108 to transect 150, previously obtained sample results were used in conjunction with the results from the investigation described above. This data is shown on Figure 1 (maps 1 and 2). The riverbanks in this stretch of river were evaluated as eleven distinct averaging areas/zones based on geographic distribution of the sample locations, observed characteristics of the soil types and trends in the PCB data. The data within each zone was then broken down further into groups that represented the locations by their elevation on the riverbank within each zone. Some zones were broken down into as many as three groups (low bank, mid bank and high bank) based on apparent trends in the PCB data. All of the newly established zones (with the exception of Zone 3a and Zone 4) were located above areas that had been previously evaluated and have remediation depths already determined by the EE/CA. The entire riverbanks in Zone 3a and Zone 4 were reevaluated due to availability of additional data that was not accessible when the EE/CA calculations were performed. Figure 1 (maps 1 and 2) display all zones that were reevaluated as part of this evaluation. Also, the lower bank areas that had remediation limits determined by the EE/CA are displayed and labeled as "Existing".

All twenty-one groups of riverbank soil data were evaluated by calculating the 95% or 99% Upper Confidence Level (UCL) of the arithmetic mean and comparing the bank soil cleanup goal of 10 ppm PCB to each UCL calculated. UCL values were calculated using the EPA approved *Pro UCL* software (version 2.1, December, 2002). For all the data sets, the 0-3 foot depth was evaluated first. If the UCL results were lower than the 10 ppm cleanup level, then no remediation was required within the area the data set represented. If the 0-3 foot depth UCL results exceeded the 10 ppm cleanup level, then additional calculations were performed on the 0-1 and 1-3 foot depths. If the 0-1 foot UCL result exceeded the 10 ppm cleanup level and the 1-3 foot result was lower than the cleanup level than only 0-1 foot remediation was required. If the 0-1 foot UCL result was below the 10 ppm cleanup level and the 1-3 foot result exceeded the cleanup level, then 0-3 foot remediation was required since the 0-1 foot layer of soil can not be left in

place while remediating the 1-3 foot depth interval. If both the 0-1 and the 1-3 foot UCL result exceeded the 10 ppm cleanup level, then the 0-3 foot remediation was required.

In some cases the 0-1 and the 1-3 foot depth data sets did not have enough data to obtain a UCL result, in those cases the maximum PCB result within the data set was used as a UCL number.

The Pro UCL Software printouts containing the results of the UCL calculations are attached to this report in Attachment A. The following section describes the data sets, including the UCL calculation results, utilized for the evaluation of each averaging area. Table 3 is an overall summary of the UCL results and remediation requirements for each zone. Figure 2 displays the final limit of remediation as determined by the EE/CA and the further modified by data evaluation summarized in this report. For bank areas labeled "Existing", remediation depths were determined in the EE/CA report. For bank areas labeled with a zone designation, remediation depths were determined by the evaluation summarized in this report.

Each of the Zones and data groups is described in detail below:

West riverbank:

Zone 1.
Located on the west riverbank beginning on transect 108 and ending at half distance between transects 114 and 116. Data within the Zone was evaluated as three groups, low bank, mid bank and high bank.

Zone 1 low: This group consists of 3 sample locations including 11 total samples from depths of 0 to 3 feet. The data set had an average PCB concentration of 3.40 ppm and a maximum PCB concentration of 22 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 8.24 ppm. Therefore, the 95% UCL fell below the cleanup level of 10 ppm and no remediation is required.

Zone 1 mid: This group consists of 2 sample locations including 6 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 0.088 ppm and a maximum PCB concentration of 0.22 ppm. The data was determined to have a normal distribution and the 95% UCL was calculated to be 0.15 ppm. Therefore, the 95% UCL fell below the cleanup level of 10 ppm and no remediation is required.

Zone 1 high: This group consists of 15 sample locations including 67 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 0.68 ppm and a maximum PCB concentration of 11.0 ppm. The data was determined to have a non-parametric distribution and the 95% UCL was calculated to be between 1.00 and 2.48 ppm. Therefore, the 95% UCL fell below the cleanup level of 10 ppm and no remediation is required.

Zone 2a.
Located on the west riverbank beginning half way between transects 114 and 116 and ending at half distance between transects 120 and 122. Data within the Zone was evaluated as three groups, low bank, mid bank and high bank.

Zone 2a low: This group consists of 3 sample locations including 10 total samples from depths of 0 to 3 feet. The data set had an average PCB concentration of 0.13 ppm and a maximum PCB concentration of 0.78 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 0.63 ppm. Therefore, the 95% UCL fell below the cleanup level of 10 ppm and no remediation is required.

Zone 2a mid: This group consists of 3 sample locations including 10 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 0.109 ppm and a maximum PCB concentration of 0.31 ppm. The data was determined to have a normal distribution and the 95% UCL was calculated to be 0.16 ppm. Therefore, the 95% UCL fell below the cleanup level of 10 ppm and no remediation is required.

Zone 2a high: This group consists of 13 sample locations including 61 total samples from depth of 0 to 2 feet. The data set had an average PCB concentration of 0.53 ppm and a maximum PCB concentration of 6.6 ppm. The data was determined to have a non-parametric distribution and the 95% UCL was calculated to be between 0.78 to 3.04 ppm. Therefore, the 95% UCL fell below the cleanup level of 10 ppm and no remediation is required.

Zone 2b.
Located on the west riverbank beginning half way between transects 120 and 122 and ending at half distance between transects 128 and 130. Data within the Zone was evaluated as one group only, high bank.

Zone 2b high: This group consists of 4 sample locations including 12 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 0.14 ppm and a maximum PCB concentration of 0.32 ppm. The data was determined to have a normal distribution and the 95% UCL was calculated to be 0.20 ppm. Therefore, the 95% UCL fell below the cleanup level of 10 ppm and no remediation is required.

Zone 2c.
Located on the west riverbank beginning half way between transects 120 and 122 and ending at half distance between transects 126 and 128. Data within the Zone was evaluated as one group only, mid bank.

Zone 2c mid: This group consists of 3 sample locations including 8 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 10.14 ppm and a maximum PCB concentration of 22.0 ppm. The data was determined to have a normal distribution and the 95% UCL was calculated to be 17.24 ppm. Therefore, the 95% UCL

exceeded the cleanup level of 10 ppm and additional calculations were performed on the 0-1 and 1-3 foot depths. The 0-1 foot depth data set did not have enough data to obtain a UCL result. The maximum PCB result within the data set was used as a UCL number, which was 22.0 ppm. Therefore, the 95% UCL for the 0-1 foot depth interval exceeded the cleanup level of 10 ppm. The 1-3 foot depth data set had an average PCB concentration of 2.74 ppm and a maximum PCB concentration of 8.4 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 7.88 ppm. Therefore, the 95% UCL fell below the cleanup level of 10 ppm. Since the UCL result for the 0-1 foot depth indicates that the PCB concentrations exceed the cleanup level of 10 ppm, 0-1 foot remediation is necessary.

Zone 2d.
Located on the west riverbank beginning half way between transects 126 and 128 and ending at transect 130. Data within the Zone was evaluated as one group only, mid bank.

Zone 2d mid: This group consists of 3 sample locations including 6 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 28.91 ppm and a maximum PCB concentration of 100.00 ppm. The data was determined to have a normal distribution and the 95% UCL was calculated to be 70.44 ppm. Therefore, the 95% UCL exceeded the cleanup level of 10 ppm and additional calculations were performed on the 0-1 and 1-3 foot depths. Both the 0-1 and the 1-3 foot depth data sets did not have enough data to obtain the UCL results. The maximum PCB result within each data set was used as a UCL number, for the 0-1 foot the result was 2.4 ppm and for the 1-3 foot the result was 100.00 ppm. The 95% UCL for the 0-1 foot depth interval fell below the cleanup level of 10 ppm; however the 1-3 foot UCL result exceeded the cleanup level. Since the UCL result for the 1-3 foot depth indicates that the PCB concentrations exceed the cleanup level of 10 ppm, 0-3 foot remediation is necessary.

Zone 3a.
Located on the west riverbank beginning half way between transects 130 and 132 and ending at transect 142. GE performed a temporary remediation (classified as an immediate response action or "IRA") in 1996 and 1997 in Zone 3a. However, 0-3 foot remediation was not performed in all areas of Zone 3a. Therefore, additional calculations were performed to determine if additional remediation is required. The PCB results for samples located in areas that were remediated were replaced by one-half the detection limit for clean backfill. In areas where remediation was not performed to a depth of three feet, pre-excavation data used. Data within the Zone was evaluated as one group only.

Zone 3a: This group consists of 29 sample locations including 161 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 9.59 ppm and a maximum PCB concentration of 700 ppm. The data was determined to have a non-parametric distribution and the 95% UCL was calculated to be between 17.27 and 42.95 ppm. Therefore, the 95% UCL exceeded the cleanup level of 10 ppm and additional calculations were performed. Since the Zone 3a riverbank has been previously

remediated by GE, individual sample locations and the previous limits of remediation were reviewed in detail. It appeared that there was an area within the riverbank in Zone 3a with one PCB sample result of 700 ppm that was not excavated during previous remediation efforts. The Zone 3a bank 0-3 foot data set was recalculated replacing the 700 ppm PCB result with one-half the detection limit of clean backfill (i.e., 0.05 ppm). The PCB average concentration changed to 4.95 ppm and the maximum PCB concentration became 100.00 ppm. The data was determined to have a non-parametric data distribution and the 95% UCL was calculated to be between 6.71 and 9.68, both of which are below the 10 ppm cleanup level. Therefore, additional 0-3 foot "hot spot" remediation is only required around sample point I8-4-7-22 and no remediation is required in the remainder of Zone 3a.

Zone 3.
Located on the west riverbank beginning half way between transects 144 and 146 and ending at transect 150. Data within the Zone was evaluated as two groups, mid bank and high bank.

Zone 3 mid: This group consists of 3 sample locations including 9 total samples from depths of 0 to 3 feet. The data set had an average PCB concentration of 38.99 ppm and a maximum PCB concentration of 93.00 ppm. The data was determined to have a normal distribution and the 95% UCL was calculated to be 59.89 ppm. Therefore, the 95% UCL exceeded the cleanup level of 10 ppm and additional calculations were performed on the 0-1 and 1-3 foot depths. The 0-1 foot depth data set had an average PCB concentration of 24.23 ppm and a maximum PCB concentration of 34.00 ppm. The data was determined to have a normal distribution and the 95% UCL was calculated to be 39.36 ppm. The 1-3 foot depth data set had an average PCB concentration of 53.75 ppm and a maximum PCB concentration of 93.00 ppm. The data was determined to have a normal distribution and the 95% UCL was calculated to be 99.70 ppm. Therefore, the 95% UCL for both the 0-1 and 1-3 foot depth exceeded the cleanup level of 10 ppm. Since the UCL results for both the 0-1 and the 1-3 foot depths indicate that the PCB concentrations exceed the cleanup level of 10 ppm, 0-3 foot remediation is necessary.

Zone 3 high: This group consists of 2 sample locations including 6 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 0.25 ppm and a maximum PCB concentration of 0.74 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 1.08 ppm. Therefore, the 95% UCL fell below the cleanup level of 10 ppm and no remediation is required.

East riverbank:

Zone 4.
Located on the east riverbank beginning on transects 108 and ending at half distance between transects 116 and 118. Data within the Zone was evaluated as three groups, low bank, mid bank and high bank.

The entire riverbank (toe to top of bank) in this zone was re-evaluated due to the following reasons:

- This zone includes the four residential properties that were reclassified to recreational properties. The EE/CA assumed a residential cleanup level.
- Data from one of the residential property lot was inadvertently excluded from the data analysis performed in the EE/CA
- Due to lack of access, one residential property was not sampled as part of the EE/CA sampling efforts. This property was sampled in the 2002 supplemental sampling event.

Zone 4 low: This group consists of 12 sample locations including 30 total samples from depths of 0 to 3 feet. The data set had an average PCB concentration of 15.18 ppm and a maximum PCB concentration 300.00 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 22.00 ppm. Therefore, the 95% UCL exceeded the cleanup level of 10 ppm and additional calculations were performed on the 0-1 and 1-3 foot depths. The 0-1 foot depth data set had an average PCB concentration of 31.73 ppm and a maximum PCB concentration of 300.00 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 171.34 ppm. The 1-3 foot depth data set had an average PCB concentration of 1.94 ppm and a maximum PCB concentration of 6.02 ppm. The data was determined to have a normal distribution and the 95% UCL was calculated to be 2.69 ppm. Therefore, the 95% UCL for the 0-1 foot depth exceeded the cleanup level of 10 ppm and 1-3 foot depth result fell below the cleanup level. Since the UCL result for the 0-1 foot depth indicates that the PCB concentrations exceed the cleanup level of 10 ppm, 0-1 foot remediation is necessary.

Zone 4 mid: This group consists of 11 sample locations including 33 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 6.39 ppm and a maximum PCB concentration of 42.00 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 19.22 ppm. Therefore, the 95% UCL exceeded the cleanup level of 10 ppm and additional calculations were performed on the 0-1 and 1-3 foot depths. The 0-1 foot depth data set had an average PCB concentration of 2.98 ppm and a maximum PCB concentration of 20.00 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 7.46 ppm. The 1-3 foot depth data set had an average PCB concentration of 8.56 ppm and a maximum PCB concentration of 42.00 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 35.97 ppm. The 95% UCL for the 0-1 foot depth interval fell below the cleanup level of 10 ppm; however the 1-3 foot UCL result exceeded the cleanup level. Since the UCL result for the 1-3 foot depth indicates that the PCB concentrations exceed the cleanup level of 10 ppm, 0-3 foot remediation is necessary.

Zone 4 high: This group consists of 6 sample locations including 19 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 0.66 ppm and a maximum PCB concentration of 3.6 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 1.11 ppm. Therefore, the 95% UCL fell below the cleanup level of 10 ppm and no remediation is required.

Zone 5.
Located on the east riverbank beginning half way between transects 116 and 118 and ending at half distance between transects 122 and 124. Data within the Zone was evaluated as two groups, mid bank and high bank.

Zone 5 mid: This group consists of 3 sample locations including 10 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 11.19 ppm and a maximum PCB concentration of 65.00 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 29.82 ppm. Therefore, the 95% UCL exceeded the cleanup level of 10 ppm and additional calculations were performed on the 0-1 and 1-3 foot depths. The 0-1 foot depth data set did not have enough data to obtain a UCL result. The maximum PCB result within the data set was used as a UCL number, which was 9.30 ppm. The 1-3 foot depth data set had an average PCB concentration of 13.96 ppm and a maximum PCB concentration of 65.00 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 82.22 ppm. The 95% UCL for the 0-1 foot depth interval fell below the cleanup level of 10 ppm; however the 1-3 foot UCL result exceeded the cleanup level. Since the UCL result for the 1-3 foot depth indicates that the PCB concentrations exceed the cleanup level of 10 ppm, 0-3 foot remediation is necessary.

Zone 5 high: This group consists of 3 sample locations including 9 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 1,733.65 ppm and a maximum PCB concentration of 13,000.00 ppm. The data was determined to have a lognormal distribution and the 95% UCL could not calculated due to the very high PCB result (13,000 ppm). Since the UCL could not be calculated the maximum result within the data set was used as a UCL number (13,000 ppm). Therefore, the 95% UCL exceeded the cleanup level of 10 ppm and additional calculations were performed on the 0-1 and 1-3 foot depths. The 0-1 foot depth data set did not have enough data to obtain a UCL result. The maximum PCB result within the data set was used as a UCL number, which was 100.00 ppm. The 1-3 foot depth data set had an average PCB concentration of 2,577.02 ppm and a maximum PCB concentration of 13,000.00 ppm. The data was determined to have a lognormal distribution and the 95% UCL could not calculated due to the very high PCB result (13,000 ppm). Since the UCL could not be calculated the maximum result within the data set was used as a UCL number, which was 13,000 ppm. Therefore, the 95% UCL for both the 0-1 and 1-3 foot depth exceeded the cleanup level of 10 ppm. Since the UCL result for both the 0-1 and 1-3 foot depth indicate that the PCB concentrations exceed the cleanup level of 10 ppm, 0-3 foot remediation is necessary.

Zone 6.
Located on the east riverbank beginning half way between transects 122 and 124 and ending at half distance between transects 128 and 130. Data within the Zone was evaluated as two groups, mid bank and high bank.

Zone 6 mid: This group consists of 3 sample locations including 9 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 30.77 ppm and a maximum PCB concentration of 84.00 ppm. The data was determined to have a normal distribution and the 95% UCL was calculated to be 48.98 ppm. Therefore, the 95% UCL exceeded the cleanup level of 10 ppm and additional calculations were performed on the 0-1 and 1-3 foot depths. The 0-1 foot depth data set did not have enough data to obtain a UCL result. The maximum PCB result within the data set was used as a UCL number, which was 84.00 ppm. The 1-3 foot depth data set had an average PCB concentration of 15.99 ppm and a maximum PCB concentration of 33.00 ppm. The data was determined to have a normal distribution and the 95% UCL was calculated to be 27.78 ppm. Therefore, the 95% UCL for both the 0-1 and 1-3 foot depth exceeded the cleanup level of 10 ppm. Since the UCL result for both the 0-1 and 1-3 foot depth indicate that the PCB concentrations exceed the cleanup level of 10 ppm, 0-3 foot remediation is necessary.

Zone 6 high: This group consists of 3 sample locations including 10 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 0.28 ppm and a maximum PCB concentration of 0.92 ppm. The data was determined to have a lognormal distribution and the 95% UCL was calculated to be 0.70 ppm. Therefore, the 95% UCL fell below the cleanup level of 10 ppm and no remediation is required.

Zone 7.
Located on the east riverbank beginning half way between transects 128 and 130 and ending at transect 150. Data within the Zone was evaluated as one group, mid/high bank.

Zone 7 mid/high: This group consists of 25 sample locations including 79 total samples from depth of 0 to 3 feet. The data set had an average PCB concentration of 1.36 ppm and a maximum PCB concentration of 37.00 ppm. The data was determined to have a non-parametric distribution and the 95% UCL was calculated to be between 2.33 and 4.09 ppm. Therefore, the 95% UCL fell below the cleanup level of 10 ppm and no remediation is required.

Deep Residential PCB Evaluation: Greater than 3 Feet

For the Elm Street to Dawes Avenue section of the 1.5 Mile Reach, the EE/CA classified four properties as residential and the remaining riverbank properties were classified as recreational. These four residential properties are located immediately downstream of the Elm Street Bridge on the east side of the river. Two out of the four are commercial properties that contain residential apartments above stores and the remaining two are typical residential properties. After the EE/CA and the 2002 supplemental sampling was completed, EPA reached an agreement with the homeowners of the two residential properties to permanently relocate. The houses will be demolished and the properties turned over to the City of Pittsfield. Therefore, the riverbank on these two properties were reclassified as recreational areas. In addition, due to the extremely steep banks

(one of which consists entirely of a timber retaining wall) on the two commercial properties with apartments, EPA determined that access to these banks is very limited and that a recreational exposure scenario is more appropriate. Therefore, all riverbank soil from Elm Street to Dawes Avenue is now considered "recreational" for the purpose of determining cleanup levels and the evaluation of PCBs at depths greater than three feet on residential properties is no longer applicable.

Appendix IX SVOC Data Evaluation

Based on a review of existing EE/CA data between Elm Street and Dawes Avenue, exceedances of applicable cleanup criteria were observed for selected Appendix IX (non-PCB) constituents. These exceedances were limited to SVOCs that are typically associated with coal gasification by-products such as coal tar.

The exceedances were located on the west riverbank from transects 108 to 130 and on the east riverbank at transect 110 and again from transects 130 to 150. On the west riverbank, the exceedances occurred at various bank heights, from lower bank samples to "uppermost" bank samples. Therefore, 18 additional samples (sixteen samples plus two duplicate samples) were collected and analyzed for Appendix IX SVOCs. These sample locations were spaced evenly between the previous "uppermost" bank sample locations and the top of bank. (Note: since exceedances of the cleanup criteria for other non-PCB compounds such as metals and VOCs were not observed in the EE/CA investigation, the additional sampling was limited to SVOCs.)

On the east riverbank at transect 110, the "mid bank" sample from the EE/CA contained exceedances of the SVOC cleanup criteria. Two additional samples were collected for SVOCs along this transect at elevations above those collected during the EE/CA and below the top of the bank. The SVOC exceedances identified in the EE/CA for transects 130 to 150 on the east bank were all in lower bank samples, with no exceedances in "mid" or "upper" bank samples. This indicates that elevated concentrations of SVOCs in this area are limited to the lower portion of the riverbank. Therefore, no further sampling or SVOC analysis is required between the "upper bank" EE/CA samples and the top of bank in this area.

Both the 2002 supplemental SVOC data and the existing SOVC data from the EE/CA were used in this report's Appendix IX SVOC data evaluation are shown in Table 2. All of these sample locations are shown on Figure 3. To determine if additional bank soil remediation beyond that necessary to address PCBs is necessary, a data evaluation process equivalent to that required of General Electric under the Consent Decree and equivalent to the one conducted in the EE/CA was performed. The first step in the process was to identify exposure/evaluation areas. Two exposure areas were identified. One exposure area is on the west riverbank and is located from transect 108 to 130. The exposure area encompasses the entire riverbank. A second exposure area is on the east riverbank and is located from transect 108 to 116. The exposure area encompasses the entire riverbank. The east riverbank exposure area was expanded beyond transect 110 to match the PCB riverbank zone/averaging area.

The exposure areas were then divided into polygons that represent each SVOC sample location. This was done both for sample locations from the EE/CA as well as new sample locations. See Figure 3. The SVOC sample results for samples located in areas subject to remediation to address PCBs were replaced with the detection limit obtained for samples collected from clean backfill. The resulting post-PCB remediation SVOC concentrations are shown in Table 4 for both exposure areas.

Next, the post-PCB remediation maximum value for each SVOC constituent was compared to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for residential areas (recreational PRGs do not exist). If the maximum concentration exceeded the PRG, then the constituent was retained for further evaluation. The next step was to calculate the post-PCB remediation arithmetic average for each retained constituent. Then, the average constituent concentration was compared to the MCP Method 1 S-2 standards for soil to determine if further remediation is required. Table 5 summarizes this data evaluation.

To address the SVOC exceeedances shown in Table 5, certain polygons were selected for remediation. The depth of remediation required for each polygon corresponds to the sample depth of the associated SVOC exceeedance. The polygons that require additional remediation based on SVOC exceedances are shown on Figure 3. Sufficient polygons were selected for additional remediation such that the resulting maximum constituent concentration was less than the PRG or the average constituent concentration complied with the MCP Method 1 S-2 standard. The post-PCB, post-SVOC remediation SVOC constituent concentrations are shown in Table 6 and the post-PCB, post-SVOC Remediation SVOC maximum concentrations, average concentrations and data evaluations are shown in Table 7.

The final remediation limits to address PCBs and SVOCs from Elm Street to Dawes Avenue are shown in Figure 2.

TABLE 1
PCB Results used in the PCB UCL Calculations

ZONE 1 LOW

Location ID	Depth (ft)	Total PCBs (ppm)
BS000230	0 - 1	22
BS000230	0 - 1	22
BS000230	1 - 2	3.4
BS000230	2 - 3	1.2
BS000232	0 - 1	0.56
BS000232	1 - 2	1.9

Location ID	Depth (ft)	Total PCBs (ppm)
BS000232	2 - 3	0.27
BS000234	0 - 1	0.79
BS000234	0 - 1	0.79
BS000234	1 - 2	0.33
BS000234	2 - 3	0.17

ZONE 1 MID

Location ID	Depth (ft)	Total PCBs (ppm)
BS000231	0 - 1	0.082
BS000231	1 - 2	0.018U
BS000231	2 - 3	0.018U

Location ID	Depth (ft)	Total PCBs (ppm)
BS000233	0 - 1	0.22
BS000233	1 - 2	0.068
BS000233	2 - 3	0.14

ZONE 1 HIGH

Location ID	Depth (ft)	Total PCBs (ppm)
BS000229	0 - 1	0.27
BS000229	1 - 2	0.33J
BS000229	2 - 3	0.12
R87A000	0 - 0.5	0.2J
R87A000	0.5 - 1	0.5U
R87A000	1 - 1.5	0.6U
R87A000	1.5 - 2	0.6
R87A025	0 - 0.5	0.5U
R87A025	0.5 - 1	0.5U
R87A025	1 - 1.5	0.6U
R87A025	1.5 - 2	0.6U
R87A050	0 - 0.5	0.15
R87A050	0 - 0.5	0.6U
R87A050	0.5 - 1	0.4J
R87A050	1 - 1.5	0.4J
R87A050	1.5 - 2	1.3
R87A075	0 - 0.5	0.3J
R87A075	0.5 - 1	0.5J
R87A075	1 - 1.5	0.4J
R87A075	1.5 - 2	0.3J
R87A100	0 - 0.5	0.3J
R87A100	0 - 0.5	1.1U
R87A100	0.5 - 1	1.1
R87A100	1 - 1.5	0.7
R87A100	1.5 - 2	0.4J
R87A125	0 - 0.5	0.3J
R87A125	0.5 - 1	0.1U
R87A125	0.5 - 1	0.5U
R87A125	1 - 1.5	0.3J

Location ID	Depth (ft)	Total PCBs (ppm)
R87A175	1.5 - 2	0.9U
R87A200	0 - 0.5	0.4U
R87A200	0.5 - 1	0.3J
R87A200	0.5 - 1	0.5U
R87A200	1 - 1.5	0.6U
R87A200	1.5 - 2	0.5U
R87A225	0 - 0.5	0.4U
R87A225	0.5 - 1	0.6U
R87A225	1 - 1.5	0.4U
R87A225	1.5 - 2	0.5U
R87A250	0 - 0.5	1U
R87A250	0.5 - 1	0.6U
R87A250	1 - 1.5	1.1U
R87A250	1.5 - 2	0.1U
R87A250	1.5 - 2	0.5U
R87A275	0 - 0.5	1.4U
R87A275	0.5 - 1	1.3U
R87A275	1 - 1.5	2U
R87A275	1.5 - 2	1.2U
R87A300	0 - 0.5	0.5U
R87A300	0.5 - 1	1.6U
R87A300	1 - 1.5	1.1U
R87A300	1 - 1.5	1.2U
R87A300	1.5 - 2	11U
R87A325	0 - 0.5	0.1
R87A325	0 - 0.5	0.6U
R87A325	0.5 - 1	0.5U
R87A325	1 - 1.5	0.5J
R87A325	1.5 - 2	11

U - Non-detects J - Indicates an estimated value

TABLE 1
PCB Results used in the PCB UCL Calculations

ZONE 1 HIGH

Location ID	Depth (ft)	Total PCBs (ppm)
R87A125	1.5 - 2	0.7
R87A175	0 - 0.5	0.7U
R87A175	0.5 - 1	0.5U
R87A175	1 - 1.5	0.29
R87A175	1 - 1.5	0.5U

Location ID	Depth (ft)	Total PCBs (ppm)
R87A350	0 - 0.5	0.6U
R87A350	0.5 - 1	0.3J
R87A350	1 - 1.5	0.7U
R87A350	1.5 - 2	0.6U

ZONE 2a LOW

Location ID	Depth (ft)	Total PCBs (ppm)
BS000236	0 - 1	0.15J
BS000236	0 - 1	0.34J
BS000236	1 - 2	0.031J
BS000236	2 - 3	0.019U
BS000238	0 - 1	0.02U

Location ID	Depth (ft)	Total PCBs (ppm)
BS000238	1 - 2	0.02U
BS000238	2 - 3	0.02U
BS000240	0 - 1	0.061
BS000240	0 - 1	0.78
BS000240	2 - 3	0.026J

ZONE 2a MID

Location ID	Depth (ft)	Total PCBs (ppm)
BS000235	0 - 1	0.075
BS000235	1 - 2	0.022U
BS000235	1 - 2	0.023U
BS000235	2 - 3	0.034
BS000237	0 - 1	0.31

Location ID	Depth (ft)	Total PCBs (ppm)
BS000237	1 - 2	0.15
BS000237	2 - 3	0.077
BS000239	0 - 1	0.041
BS000239	1 - 2	0.11
BS000239	2 - 3	0.16

ZONE 2a HIGH

Location ID	Depth (ft)	Total PCBs (ppm)
R87A375	0 - 0.5	0.6U
R87A375	0.5 - 1	0.11
R87A375	0.5 - 1	0.3J
R87A375	1 - 1.5	0.8U
R87A375	1.5 - 2	0.7U
R87A400	0 - 0.5	0.6U
R87A400	0.5 - 1	0.5U
R87A400	1 - 1.5	0.6
R87A400	1.5 - 2	0.6U
R87A400	1.5 - 2	6.6U
R87A425	0 - 0.5	0.6U
R87A425	0.5 - 1	0.6U
R87A425	1 - 1.5	0.1U
R87A425	1 - 1.5	0.6U
R87A425	1.5 - 2	0.6U
R87A450	0 - 0.5	0.6U

Location ID	Depth (ft)	Total PCBs (ppm)
R87A525	1 - 1.5	0.6J
R87A525	1.5 - 2	0.5U
R87A550	0 - 0.5	0.6U
R87A550	0.5 - 1	0.7U
R87A550	1 - 1.5	0.7U
R87A550	1.5 - 2	0.6U
R87A575	0 - 0.5	0.07
R87A575	0 - 0.5	0.5U
R87A575	0.5 - 1	0.5U
R87A575	1 - 1.5	0.5U
R87A575	1.5 - 2	0.2J
R87A600	0 - 0.5	0.6U
R87A600	0.5 - 1	0.6U
R87A600	0.5 - 1	0.6U
R87A600	1 - 1.5	0.5U
R87A600	1.5 - 2	0.5U

U - Non-detects J - Indicates an estimated value

TABLE 1
PCB Results used in the PCB UCL Calculations

ZONE 2a HIGH

Location ID	Depth (ft)	Total PCBs (ppm)
R87A450	0.5 - 1	0.5U
R87A450	1 - 1.5	0.5U
R87A450	1.5 - 2	0.5U
R87A475	0 - 0.5	0.3J
R87A475	0.5 - 1	0.6U
R87A475	1 - 1.5	0.6U
R87A475	1.5 - 2	0.7U
R87A500	0 - 0.5	0.3J
R87A500	0 - 0.5	6U
R87A500	0.5 - 1	0.4J
R87A500	1 - 1.5	0.4J
R87A500	1.5 - 2	0.22
R87A500	1.5 - 2	0.3J
R87A525	0 - 0.5	0.6U
R87A525	0.5 - 1	0.9U

Location ID	Depth (ft)	Total PCBs (ppm)
R87A625	0 - 0.5	0.5U
R87A625	0.5 - 1	0.23
R87A625	0.5 - 1	0.2J
R87A625	1 - 1.5	0.6U
R87A625	1.5 - 2	0.6U
R87A650	0 - 0.5	0.5U
R87A650	0.5 - 1	0.5U
R87A650	1 - 1.5	0.5U
R87A650	1.5 - 2	11U
R87A675	0 - 0.5	0.7U
R87A675	0.5 - 1	0.5U
R87A675	1 - 1.5	0.09U
R87A675	1 - 1.5	0.6U
R87A675	1.5 - 2	0.6U

ZONE 2b HIGH

Location ID	Depth (ft)	Total PCBs (ppm)
BS000241	0 - 1	0.32
BS000241	1 - 2	0.26
BS000241	2 - 3	0.036
BS000243	0 - 1	0.095
BS000243	1 - 2	0.052
BS000243	2 - 3	0.064

Location ID	Depth (ft)	Total PCBs (ppm)
BS000245	0 - 1	0.2
BS000245	1 - 2	0.019U
BS000245	2 - 3	0.02U
BS000247	0 - 1	0.25
BS000247	1 - 2	0.27
BS000247	2 - 3	0.12

ZONE 2c MID

Location ID	Depth (ft)	Total PCBs (ppm)
BS000242	0 - 1	22J
BS000244	0 - 1	18
BS000244	1 - 2	8.4
BS000244	2 - 3	0.94

Location ID	Depth (ft)	Total PCBs (ppm)
BS000246	0 - 1	20J
BS000246	1 - 2	0.63
BS000246	1 - 2	0.64
BS000246	2 - 3	0.99J

ZONE 2d MID

Location ID	Depth (ft)	Total PCBs (ppm)
BS000248	0 - 1	2.4
BS000248	1 - 2	42
BS000248	2 - 3	100

Location ID	Depth (ft)	Total PCBs (ppm)
I8-4-6-1	0 - 0.5	0.1U
I8-4-6-2	0 - 0.5	0.1U
I8-4-6-2	0 - 0.5	0.1U

U - Non-detects J - Indicates an estimated value

TABLE 1
PCB Results used in the PCB UCL Calculations

ZONE 3a

Location ID	Depth (ft)	Total PCBs (ppm)
BW0058A	0 - 0.08	1.2
BW0059A	0 - 0.08	11
BW0060A	0 - 0.08	3.4
I8-4-5-12	0 - 0.5	0.498
I8-4-5-12	0.5 - 1	2.19
I8-4-5-12	1 - 1.5	2.43
I8-4-5-12	1.5 - 2	0.413
I8-4-5-12	2 - 2.5	0.629
I8-4-5-7	0 - 0.5	3.08
I8-4-5-7	0.5 - 1	7.55
I8-4-5-7	1 - 1.5	6.26
I8-4-5-7	1.5 - 2	0.787
I8-4-5-7	2 - 2.5	5.04
I8-4-5-7	2.5 - 3	0.1U
I8-4-5-8	0 - 0.5	11.3
I8-4-5-8	0 - 0.5	17.7
I8-4-5-8	0.5 - 1	1.37
I8-4-5-8	1 - 1.5	0.148
I8-4-5-8	1.5 - 2	0.258
I8-4-5-9	0 - 0.5	1.59
I8-4-5-9	0.5 - 1	5.28
I8-4-5-9	1 - 1.5	0.773
I8-4-5-9	1.5 - 2	0.512
I8-4-7-1	0 - 0.5	0.1U
I8-4-7-1	0.5 - 1	0.1U
I8-4-7-1	1 - 1.5	0.1U
I8-4-7-1	1.5 - 2	0.1U
I8-4-7-1	2 - 2.5	0.1U
I8-4-7-1	2.5 - 3	0.1U
I8-4-7-10	0 - 0.5	2.71
I8-4-7-10	0.5 - 1	2.1
I8-4-7-10	1 - 1.5	4.45
I8-4-7-10	1.5 - 2	23.6
I8-4-7-10	2 - 2.5	34.7
I8-4-7-10	2.5 - 3	7.84
I8-4-7-11	0 - 0.5	4.64
I8-4-7-11	0.5 - 1	13.3
I8-4-7-11	1 - 1.5	26.1
I8-4-7-11	1.5 - 2	59.5
I8-4-7-11	2 - 2.5	8.99
I8-4-7-11	2.5 - 3	8.66
I8-4-7-12	0 - 0.5	0.1U
I8-4-7-12	0.5 - 1	0.1U
I8-4-7-12	1 - 1.5	0.1U
I8-4-7-12	1.5 - 2	0.1U
I8-4-7-12	1.5 - 2	0.1U
I8-4-7-12	2 - 2.5	100

Location ID	Depth (ft)	Total PCBs (ppm)
I8-4-7-18	0 - 0.5	0.1U
I8-4-7-18	0.5 - 1	0.1U
I8-4-7-18	1 - 1.5	0.1U
I8-4-7-18	1.5 - 2	0.1U
I8-4-7-18	2 - 2.5	0.1U
I8-4-7-18	2.5 - 3	0.1U
I8-4-7-19	0 - 0.5	0.1U
I8-4-7-19	0 - 0.5	0.1U
I8-4-7-19	0.5 - 1	0.1U
I8-4-7-19	1 - 1.5	0.1U
I8-4-7-19	1.5 - 2	0.1U
I8-4-7-19	2 - 2.5	0.1U
I8-4-7-19	2.5 - 3	0.1U
I8-4-7-20	0 - 0.5	0.1U
I8-4-7-20	0.5 - 1	0.1U
I8-4-7-20	1 - 1.5	0.1U
I8-4-7-20	1.5 - 2	0.1U
I8-4-7-20	2 - 2.5	0.1U
I8-4-7-20	2.5 - 3	0.1U
I8-4-7-22	0 - 0.5	0.1U
I8-4-7-22	0.5 - 1	0.1U
I8-4-7-22	1 - 1.5	0.1U
I8-4-7-22	1.5 - 2	0.1U
I8-4-7-22	2 - 2.5	700
I8-4-7-22	2.5 - 3	6.8
I8-4-7-23	0 - 0.5	0.1U
I8-4-7-23	0 - 0.5	0.1U
I8-4-7-23	0.5 - 1	0.1U
I8-4-7-23	1 - 1.5	0.1U
I8-4-7-23	1.5 - 2	0.1U
I8-4-7-23	2 - 2.5	0.1U
I8-4-7-23	2.5 - 3	0.1U
I8-4-7-24	0 - 0.5	0.1U
I8-4-7-24	0.5 - 1	0.1U
I8-4-7-24	1 - 1.5	0.1U
I8-4-7-24	1.5 - 2	0.1U
I8-4-7-24	2 - 2.5	0.1U
I8-4-7-24	2.5 - 3	0.1U
I8-4-7-25	0 - 0.5	1.88
I8-4-7-25	0 - 0.5	1.87
I8-4-7-25	0.5 - 1	3.58
I8-4-7-25	1 - 1.5	1.2
I8-4-7-25	1.5 - 2	0.961
I8-4-7-25	2 - 2.5	1.15
I8-4-7-25	2.5 - 3	15.1
I8-4-7-26	0 - 0.5	1.49
I8-4-7-26	0.5 - 1	1.8

U - Non-detects J - Indicates an estimated value

TABLE 1
PCB Results used in the PCB UCL Calculations

ZONE 3a

Location ID	Depth (ft)	Total PCBs (ppm)
I8-4-7-12	2.5 - 3	38.7
I8-4-7-13	0 - 0.5	0.1U
I8-4-7-13	0.5 - 1	0.1U
I8-4-7-13	1 - 1.5	0.1U
I8-4-7-13	1.5 - 2	0.1U
I8-4-7-13	2 - 2.5	73.1
I8-4-7-13	2.5 - 3	24.5
I8-4-7-14	0 - 0.5	3.14
I8-4-7-14	0.5 - 1	2.52
I8-4-7-14	1 - 1.5	2.49
I8-4-7-14	1.5 - 2	4.66
I8-4-7-14	2 - 2.5	0.925
I8-4-7-14	2.5 - 3	1.54
I8-4-7-15	0 - 0.5	0.1U
I8-4-7-15	0 - 0.5	0.1U
I8-4-7-15	0.5 - 1	0.1U
I8-4-7-15	1 - 1.5	11.4
I8-4-7-15	1.5 - 2	3.92
I8-4-7-15	2 - 2.5	7.69
I8-4-7-15	2.5 - 3	6.24
I8-4-7-16	0 - 0.5	2.75
I8-4-7-16	0.5 - 1	7.57
I8-4-7-16	1 - 1.5	5.08
I8-4-7-16	1.5 - 2	1.47
I8-4-7-16	1.5 - 2	1.81
I8-4-7-16	2 - 2.5	1.22
I8-4-7-16	2.5 - 3	0.324
I8-4-7-17	0 - 0.5	0.1U
I8-4-7-17	0 - 0.5	0.1U
I8-4-7-17	0.5 - 1	0.1U
I8-4-7-17	1 - 1.5	0.1U
I8-4-7-17	1.5 - 2	0.1U
I8-4-7-17	2 - 2.5	0.1U
I8-4-7-17	2.5 - 3	0.1U

Location ID	Depth (ft)	Total PCBs (ppm)
I8-4-7-26	1 - 1.5	1.41
I8-4-7-26	1.5 - 2	1.82
I8-4-7-26	2 - 2.5	0.826
I8-4-7-26	2.5 - 3	0.139
I8-4-7-4	0 - 0.5	0.1U
I8-4-7-4	0 - 0.5	0.1U
I8-4-7-4	0.5 - 1	0.1U
I8-4-7-4	1 - 1.5	0.1U
I8-4-7-4	1.5 - 2	0.1U
I8-4-7-4	2 - 2.5	0.1U
I8-4-7-4	2.5 - 3	0.1U
I8-4-7-6	0 - 0.5	0.1U
I8-4-7-6	0.5 - 1	0.1U
I8-4-7-6	1 - 1.5	0.1U
I8-4-7-6	1.5 - 2	0.1U
I8-4-7-6	2 - 2.5	0.1U
I8-4-7-6	2.5 - 3	0.1U
I8-4-7-7	0 - 0.5	6.02
I8-4-7-7	0.5 - 1	3.13
I8-4-7-7	1 - 1.5	11.4
I8-4-7-7	1.5 - 2	9.57
I8-4-7-7	2 - 2.5	66.9
I8-4-7-7	2.5 - 3	31
I8-4-7-8	0 - 0.5	0.442
I8-4-7-8	0.5 - 1	0.275
I8-4-7-8	1 - 1.5	0.1U
I8-4-7-8	1.5 - 2	0.1U
I8-4-7-9	0 - 0.5	5.23
I8-4-7-9	0.5 - 1	4.84
I8-4-7-9	0.5 - 1	4.55
I8-4-7-9	1 - 1.5	0.611
I8-4-7-9	1.5 - 2	1.05
I8-4-7-9	2 - 2.5	0.426

ZONE 3 MID

Location ID	Depth (ft)	Total PCBs (ppm)
BS000250	0 - 1	6.9
BS000250	1 - 2	11
BS000250	2 - 3	31
BS000252	0 - 1	22
BS000252	1 - 2	93

Location ID	Depth (ft)	Total PCBs (ppm)
BS000252	2 - 3	80
I7-21-3-3	0 - 0.5	33
I7-21-3-3	0 - 0.5	35
I7-21-3-3	0.5 - 1	34

U - Non-detects J - Indicates an estimated value

TABLE 1
PCB Results used in the PCB UCL Calculations

ZONE 3 HIGH

Location ID	Depth (ft)	Total PCBs (ppm)
BS000249	0 - 1	0.18
BS000249	1 - 2	0.058
BS000249	2 - 3	0.14

Location ID	Depth (ft)	Total PCBs (ppm)
BS000251	0 - 1	0.12
BS000251	1 - 2	0.25
BS000251	2 - 3	0.74

ZONE 4 LOW

Location ID	Depth (ft)	Total PCBs (ppm)
BS000321	0 - 1	0.8
BS000337	0 - 1	19
BS000337	1 - 2	1.1
BS000337	2 - 3	2.2
R85AZ074	0 - 0.5	300
R85AZ074	1 - 1.5	2.9
R85AZ074	2 - 2.5	3.1
R85BZ080	0 - 0.5	0.7J
R85BZ080	1 - 1.5	1.6J
R85BZ080	2 - 2.5	1.5J
R85CZ093	0 - 0.5	0.7U
R85CZ093	1 - 1.5	0.6U
R85CZ093	2 - 2.5	0.12U
R85CZ093	2 - 2.5	0.5U
R85DZ105	0 - 0.5	0.35

Location ID	Depth (ft)	Total PCBs (ppm)
R85DZ105	0 - 0.5	0.7U
R85DZ105	1 - 1.5	0.5U
R85DZ105	2 - 2.5	0.6U
RB021104	0 - 0.5	6.32
RB021105	0 - 0.5	8J
RB021105	0 - 0.5	17.1J
RB021105	1 - 1.5	3.13
RB021105	2 - 2.5	0.778U
RB021106	0 - 0.5	4.77
RB021164	0 - 0.5	22.8J
RB021165	0 - 0.5	4.64
RB021165	1 - 1.5	3.84
RB021166	0 - 0.5	8.46
RB021166	1 - 1.5	1.99
RB021166	2 - 2.5	6.02

ZONE 4 MID

Location ID	Depth (ft)	Total PCBs (ppm)
BS000254	0 - 1	0.65J
BS000254	1 - 2	6.5
BS000254	2 - 3	22
BS000256	0 - 1	0.16
BS000256	1 - 2	0.062
BS000256	2 - 3	0.33
BS000315	0 - 1	3.3
BS000315	1 - 2	42J
BS000315	2 - 3	1.3
BS000317	0 - 1	20
BS000317	1 - 2	17
BS000317	2 - 3	35
BS000317	2 - 3	36
BS000328	0 - 1	1.4
BS000338	0 - 1	1.6J
BS000338	1 - 2	13
BS000338	2 - 3	3

Location ID	Depth (ft)	Total PCBs (ppm)
R85AZ066	0 - 0.5	2.2
R85AZ066	1 - 1.5	2.3
R85AZ066	2 - 2.5	1.4
R85BZ070	0 - 0.5	0.6U
R85BZ070	1 - 1.5	0.5J
R85BZ070	2 - 2.5	0.4J
R85CZ081	0 - 0.5	0.6
R85CZ081	1 - 1.5	0.23
R85CZ081	1 - 1.5	0.4J
R85CZ081	2 - 2.5	24
R85CZ087	0 - 0.5	0.5U
R85CZ087	1 - 1.5	0.5U
R85CZ087	2 - 2.5	0.6U
R85DZ095	0 - 0.5	2.3J
R85DZ095	1 - 1.5	0.6U
R85DZ095	2 - 2.5	0.6J

U - Non-detects J - Indicates an estimated value

TABLE 1
PCB Results used in the PCB UCL Calculations

ZONE 4 HIGH

Location ID	Depth (ft)	Total PCBs (ppm)
BS000253	0 - 1	0.37
BS000253	1 - 2	0.062
BS000253	2 - 3	0.61
BS000255	0 - 1	1
BS000255	1 - 2	3.6J
BS000255	2 - 3	0.18
BS000320	0 - 1	0.93
BS000320	1 - 2	0.85
BS000320	2 - 3	0.4
R85AZ058	0 - 0.5	1.2

Location ID	Depth (ft)	Total PCBs (ppm)
R85AZ058	1 - 1.5	0.5J
R85AZ058	2 - 2.5	0.5U
R85BZ060	0 - 0.5	0.11U
R85BZ060	0 - 0.5	0.5U
R85BZ060	1 - 1.5	0.5U
R85BZ060	2 - 2.5	0.6U
R85DZ085	0 - 0.5	0.6U
R85DZ085	1 - 1.5	0.6U
R85DZ085	2 - 2.5	0.5U

ZONE 5 MID

Location ID	Depth (ft)	Total PCBs (ppm)
BS000258	0 - 1	9.3
BS000258	1 - 2	5.3J
BS000258	1 - 2	5.4J
BS000258	2 - 3	0.9
BS000260	0 - 1	1.2J

Location ID	Depth (ft)	Total PCBs (ppm)
BS000260	1 - 2	0.8
BS000260	2 - 3	5.5J
BS000262	0 - 1	6.5J
BS000262	1 - 2	65
BS000262	2 - 3	6.2

ZONE 5 HIGH

Location ID	Depth (ft)	Total PCBs (ppm)
BS000257	0 - 1	100
BS000257	1 - 2	13000
BS000257	2 - 3	2400
BS000259	0 - 1	33
BS000259	1 - 2	58

Location ID	Depth (ft)	Total PCBs (ppm)
BS000259	2 - 3	1.1J
BS000261	0 - 1	7.7J
BS000261	1 - 2	2.1J
BS000261	2 - 3	0.93

ZONE 6 MID

Location ID	Depth (ft)	Total PCBs (ppm)
BS000264	0 - 1	72J
BS000264	1 - 2	33
BS000264	2 - 3	11
BS000266	0 - 1	84
BS000266	1 - 2	16

Location ID	Depth (ft)	Total PCBs (ppm)
BS000266	2 - 3	33J
BS000268	0 - 1	25
BS000268	1 - 2	0.36
BS000268	2 - 3	2.6

U - Non-detects J - Indicates an estimated value

TABLE 1
PCB Results used in the PCB UCL Calculations

ZONE 6 HIGH

Location ID	Depth (ft)	Total PCBs (ppm)
BS000263	0 - 1	0.33
BS000263	1 - 2	0.28
BS000263	2 - 3	0.16
BS000265	0 - 1	0.11
BS000265	1 - 2	0.049

Location ID	Depth (ft)	Total PCBs (ppm)
BS000265	2 - 3	0.92
BS000267	0 - 1	0.18
BS000267	1 - 2	0.35
BS000267	2 - 3	0.086
BS000267	2 - 3	0.12

ZONE 7 MID/HIGH

Location ID	Depth (ft)	Total PCBs (ppm)
BE-0017	0 - 0.5	0.5
BE-0017	1 - 1.5	0.5U
BE-0017	2 - 2.5	0.5U
BS000269	0 - 1	0.019U
BS000269	1 - 2	0.018U
BS000269	2 - 3	0.08
BS000271	0 - 1	0.077
BS000271	1 - 2	0.055
BS000271	2 - 3	0.019U
BS000273	0 - 1	3.4
BS000273	1 - 2	15
BS000273	2 - 3	25
BS000275	0 - 1	0.99J
BS000275	1 - 2	0.52
BS000275	2 - 3	0.58
BS000277	0 - 1	0.27J
BS000277	1 - 2	0.098
BS000277	2 - 3	0.019U
BS000279	0 - 1	0.45J
BS000279	1 - 2	0.48J
BS000279	2 - 3	0.071J
BS000281	0 - 1	0.17
BS000281	0 - 1	0.18
BS000281	1 - 2	0.22
BS000281	2 - 3	0.25
BS000283	0 - 1	0.95J
BS000283	1 - 2	2.2J
BS000283	2 - 3	0.93J
BS000285	0 - 1	0.19J
BS000285	1 - 2	0.031
BS000285	2 - 3	0.046J
BS000287	0 - 1	0.11
BS000287	0 - 1	0.12
BS000287	1 - 2	0.022J
BS000287	2 - 3	0.019U
BE-0014	0 - 0.5	0.5U
BE-0014	1 - 1.5	0.5U
BE-0014	2 - 2.5	0.5
BE-0020	0 - 0.5	0.5U
BE-0020	1 - 1.5	0.5

Location ID	Depth (ft)	Total PCBs (ppm)
BE-0020	2 - 2.5	0.5U
BE-0023	0 - 0.5	0.5
BE-0023	1 - 1.5	0.5
BE-0023	2 - 2.5	0.5U
BE-0026	0 - 0.5	0.5U
BE-0026	1 - 1.5	0.5U
BE-0026	2 - 2.5	37
BE-0029	0 - 0.5	0.5U
BE-0029	1 - 1.5	0.5U
BE-0029	2 - 2.5	0.5U
BS000270	0 - 1	0.041
BS000270	1 - 2	0.019U
BS000270	2 - 3	0.019U
BS000272	0 - 1	0.21
BS000272	1 - 2	0.021
BS000272	2 - 3	0.019U
BS000274	0 - 1	0.15
BS000274	1 - 2	0.019U
BS000274	2 - 3	0.079
BS000276	0 - 1	0.58
BS000276	1 - 2	0.019U
BS000276	2 - 3	0.019U
BS000278	0 - 1	1.4
BS000278	1 - 2	0.1
BS000278	2 - 3	0.02
BS000280	0 - 1	0.17
BS000280	1 - 2	0.019U
BS000280	2 - 3	0.019U
BS000282	0 - 1	0.18
BS000282	1 - 2	0.074
BS000284	0 - 1	1J
BS000284	1 - 2	1.7J
BS000284	2 - 3	0.93J
BS000286	0 - 1	0.27J
BS000286	1 - 2	0.18J
BS000286	2 - 3	0.049
BS000288	0 - 1	0.12
BS000288	1 - 2	0.019U
BS000288	2 - 3	0.019U

U - Non-detects J - Indicates an estimated value

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T110	T114	T114	T114	T116	T116	T116
Location ID	RB021101	BS000233	BS000234	RB021143	BS000235	BS000235	BS000236
Date Collected	11/16/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002	04/01/2002
Depth (ft)	0.0-0.5	0.0-1.0	2.0-3.0	0.0-0.5	1.0-2.0	1.0-2.0	0.0-1.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
APP IX SEMIVOLATILES							
1,2,4,5-TETRACHLOROBENZENE	.69 U	.7 UJ	.38 U	.46 U	.46 U	.43 U	.44 U
HEXACHLOROBENZENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
PENTACHLOROBENZENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
1,2,4-TRICHLOROBENZENE	**.081 J**	.7 U	.38 U	**.031 J**	.46 U	.43 U	.44 U
1,2-DICHLOROBENZENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 UJ
1,3,5-TRINITROBENZENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
1,3-DICHLOROBENZENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
1,3-DINITROBENZENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
1,4-DICHLOROBENZENE	**.062 J**	.7 U	.38 U	**.04 J**	.46 U	.43 U	.44 U
1,4-NAPHTHOQUINONE	.69 U	.7 U	.38 U	.46 U	**.061 J**	.43 U	.44 U
1-NAPHTHYLAMINE	.69 U	.7 U	.38 UJ	.46 U	.46 UJ	.43 UJ	.44 UJ
2,3,4,6-TETRACHLOROPHENOL	.69 U	.7 U	.38 U	R	.46 U	.43 U	.44 U
2,4,5-TRICHLOROPHENOL	1.7 UJ	1.8 U	.96 U	R	1.2 U	1.1 U	1.1 U
2,4,6-TRICHLOROPHENOL	.69 UJ	.7 U	.38 U	R	.46 U	.43 U	.44 UJ
2,4-DICHLOROPHENOL	.69 U	.7 U	.38 U	R	.46 U	.43 U	.44 U
2,4-DIMETHYLPHENOL	.69 UJ	R	R	R	R	R	R
2,4-DINITROPHENOL	1.7 U	1.8 U	.96 U	R	1.2 U	1.1 U	1.1 U
2,4-DINITROTOLUENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
2,6-DICHLOROPHENOL	.69 U	.7 U	.38 U	R	.46 U	.43 U	.44 U
2,6-DINITROTOLUENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
2-ACETYLAMINOFLUORENE	.69 U	.7 U	.38 U	.46 UJ	.46 U	.43 U	.44 U
2-CHLORONAPHTHALENE	.69 U	.7 UJ	.38 UJ	.46 U	.46 UJ	.43 UJ	.44 UJ
2-CHLOROPHENOL	.69 U	.7 UJ	.38 UJ	R	.46 U	.43 U	.44 UJ
2-METHYLNAPHTHALENE	**.13 J**	.7 UJ	**.1 J**	.46 UJ	.46 U	.43 U	**.21 J**
2-METHYLPHENOL (O-CRESOL)	.69 U	R	R	R	.46 UJ	.43 UJ	R
2-NAPHTHYLAMINE	.69 U	.7 U	.38 UJ	.46 U	.46 UJ	.43 UJ	.44 UJ
2-NITROANILINE	1.7 U	1.8 U	.96 U	1.2 U	1.2 U	1.1 U	1.1 U
2-NITROPHENOL	.69 U	.7 U	.38 U	R	.46 U	.43 U	.44 U
2-PICOLINE (ALPHA-PICOLINE)	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
3,3'-DICHLOROBENZIDINE	.69 U	R	R	.46 UJ	.46 U	.43 U	R
3,3'-DIMETHYLBENZIDINE	.69 UJ	.7 U	.38 UJ	.46 U	.46 UJ	.43 UJ	.44 UJ
3-METHYLCHOLANTHRENE	.69 U	.7 UJ	.38 U	.46 U	.46 U	.43 U	.44 U
3-NITROANILINE	1.7 U	1.8 UJ	.96 UJ	1.2 U	1.2 U	1.1 U	R
4,6-DINITRO-2-METHYLPHENOL	1.7 U	1.8 U	.96 U	R	1.2 U	1.1 U	1.1 U
4-AMINOBIPHENYL	.69 U	.7 U	.38 UJ	.46 U	.46 UJ	.43 UJ	.44 UJ
4-BROMOPHENYL PHENYL ETHER	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
4-CHLORO-3-METHYLPHENOL	.69 U	.7 UJ	.38 UJ	R	.46 U	.43 U	.44 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T110	T114	T114	T114	T116	T116	T116
Location ID	RB021101	BS000233	BS000234	RB021143	BS000235	BS000235	BS000236
Date Collected	11/16/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002	04/01/2002
Depth (ft)	0.0-0.5	0.0-1.0	2.0-3.0	0.0-0.5	1.0-2.0	1.0-2.0	0.0-1.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
4-CHLOROANILINE	.69 UJ	R	R	.46 U	.46 U	.43 U	R
4-CHLOROPHENYL PHENYL ETHER	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
4-METHYLPHENOL	.036 J	.06 J	.38 UJ	R	.46 U	.43 U	.44 UJ
4-NITROANILINE	1.7 U	1.8 UJ	.96 UJ	1.2 U	1.2 U	1.1 U	R
4-NITROPHENOL	1.7 U	1.8 U	.96 U	R	1.2 UJ	1.1 U	1.1 U
4-NITROQUINOLINE-1-OXIDE	R	R	R	R	R	R	R
5-NITRO-O-TOLUIDINE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.69 UJ	.7 UJ	.38 U	.46 U	.46 U	.43 U	.44 U
A,A-DIMETHYLPHENETHYLAMINE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
ACENAPHTHENE	.69 U	.7 U	.062 J	.038 J	.46 U	.43 U	.062 J
ACENAPTHYLENE	.52 J	.44 J	.42 J	.46 U	.025 J	.024 J	.16 J
ACETOPHENONE	.69 U	.049 J	.045 J	.46 U	.46 U	.43 U	.026 J
ANILINE	1.7 UJ	R	R	R	R	R	R
ANTHRACENE	.31 J	.094 J	.26 J	.079 J	.041 J	.034 J	.16 J
ARAMITE	.69 U	R	R	.46 U	R	R	R
AZOBENZENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
BENZO(A)ANTHRACENE	1.8	.072 J	1.9 J	.5	.14 J	.15 J	.83
BENZO(A)PYRENE	2.4 J	.053 J	2 J	.55	.16 J	.15 J	.93
BENZO(B)FLUORANTHENE	2.5	.078 J	2.4	.55	.16 J	.18 J	1.4 J
BENZO(GHI)PERYLENE	2.3	.7 UJ	.85 J	.45 J	.22 J	.29 J	.49
BENZO(K)FLUORANTHENE	2	.087 J	.38 U	.53	.21 J	.25 J	1.2
BENZYL ALCOHOL	.69 U	.7 UJ	.38 U	R	.46 U	.43 U	.44 U
BIS(2-CHLOROETHOXY) METHANE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
BIS(2-CHLOROETHYL) ETHER	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
BIS(2-CHLOROISOPROPYL) ETHER	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
BIS(2-ETHYLHEXYL) PHTHALATE	.69 U	.5 J	.052 J	.46 U	.031 J	.023 J	.029 J
BUTYLBENZYLPHTHALATE	.69 U	.083 J	.38 U	.46 U	.46 U	.43 U	.44 U
CHLOROBENZILATE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
CHRYSENE	2.5	.071 J	2.1 J	.66	.16 J	.17 J	.94
DIALLATE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
DIBENZO(A,H)ANTHRACENE	.74	.7 UJ	.72 J	.11 J	.043 J	.049 J	.18 J
DIBENZOFURAN	.077 J	.7 U	.072 J	.024 J	.46 U	.43 U	.059 J
DIETHYL PHTHALATE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
DIMETHYL PHTHALATE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
DI-N-BUTYL PHTHALATE	.69 U	.033 J	.38 U	.46 U	.46 U	.43 U	.44 U
DI-N-OCTYL PHTHALATE	.69 U	.7 UJ	.38 U	.46 U	.46 U	.43 U	.44 U
DINOSEB	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
ETHYL METHANESULFONATE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T110	T114	T114	T114	T116	T116	T116
Location ID	RB021101	BS000233	BS000234	RB021143	BS000235	BS000235	BS000236
Date Collected	11/16/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002	04/01/2002
Depth (ft)	0.0-0.5	0.0-1.0	2.0-3.0	0.0-0.5	1.0-2.0	1.0-2.0	0.0-1.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
FLUORANTHENE	3.2	.035 J	2.9 J	.97	.26 J	.25 J	1.5
FLUORENE	.1 J	.7 U	.1 J	.042 J	.46 U	.43 U	.088 J
HEXACHLOROBUTADIENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
HEXACHLOROCYCLOPENTADIENE	.69 U	R	R	.46 U	.46 U	.43 U	R
HEXACHLOROETHANE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
HEXACHLOROPROPENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
INDENO(1,2,3-C,D)PYRENE	1.7	.7 UJ	1.8 J	.46 J	.21 J	.27 J	.56
ISOPHORONE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
ISOSAFROLE	.69 U	.7 UJ	.38 U	.46 U	.46 U	.43 U	.44 U
METHAPYRILENE	.69 UJ	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
METHYL METHANESULFONATE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
NAPHTHALENE	.23 J	.7 U	.22 J	.035 J	.04 J	.055 J	.26 J
NITROBENZENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
NITROSOMETHYLETHYLAMINE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
N-NITROSODIETHYLAMINE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
N-NITROSODIMETHYLAMINE	.69 U	.7 UJ	.38 UJ	.46 U	.46 U	.43 U	.44 U
N-NITROSO-DI-N-BUTYLAMINE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
N-NITROSO-DI-N-PROPYLAMINE	.69 U	.7 UJ	.38 UJ	.46 U	.46 U	.43 U	.44 U
N-NITROSODIPHENYLAMINE	.69 U	.7 UJ	.38 UJ	.46 U	.46 U	.43 U	.44 UJ
N-NITROSOMORPHOLINE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
N-NITROSOPIPERIDINE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
N-NITROSOPYRROLIDINE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
O-TOLUIDINE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
P-DIMETHYLAMINOAZOBENZENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
PENTACHLOROETHANE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
PENTACHLORONITROBENZENE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
PENTACHLOROPHENOL	1.7 UJ	1.8 U	.96 U	R	1.2 U	1.1 U	R
PHENACETIN	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
PHENANTHRENE	1.6	.7 U	1.4 J	.57	.14 J	.14 J	.9
PHENOL	.19 J	.7 U	.38 U	R	.46 U	.43 U	.44 UJ
P-PHENYLENEDIAMINE	.69 UJ	.7 UJ	.38 UJ	.46 UJ	.46 UJ	.43 UJ	.44 UJ
PRONAMIDE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U
PYRENE	3.9	.063 J	2.7	1 J	.26 J	.23 J	1.4
PYRIDINE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	R
SAFROLE	.69 U	.7 U	.38 U	.46 U	.46 U	.43 U	.44 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T116	T116	T118	T118	T118	T120	T120
Location ID	BS000236	RB021162	BS000237	BS000238	RB021183	BS000239	BS000240
Date Collected	04/01/2002	11/12/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002
Depth (ft)	0.0-1.0	0.0-0.5	2.0-3.0	1.0-2.0	1.0-1.5	0.0-1.0	2.0-3.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
APP IX SEMIVOLATILES							
1,2,4,5-TETRACHLOROBENZENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
HEXACHLOROBENZENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
PENTACHLOROBENZENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
1,2,4-TRICHLOROBENZENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
1,2-DICHLOROBENZENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
1,3,5-TRINITROBENZENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
1,3-DICHLOROBENZENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
1,3-DINITROBENZENE	.46 U	.5 UJ	.42 U	.39 U	.53 U	.4 U	.38 U
1,4-DICHLOROBENZENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
1,4-NAPHTHOQUINONE	**.079 J**	**.16 J**	.42 U	.39 U	.53 U	.4 U	.38 U
1-NAPHTHYLAMINE	.46 UJ	.5 U	.42 UJ	.39 UJ	.53 U	.4 UJ	.38 UJ
2,3,4,6-TETRACHLOROPHENOL	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 UJ
2,4,5-TRICHLOROPHENOL	1.2 U	1.2 UJ	1.1 U	.99 U	1.3 UJ	1 U	.95 UJ
2,4,6-TRICHLOROPHENOL	.46 U	.5 UJ	.42 U	.39 U	.53 UJ	.4 U	.38 UJ
2,4-DICHLOROPHENOL	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 UJ
2,4-DIMETHYLPHENOL	**R**	.5 U	**R**	**R**	.53 U	**R**	.38 UJ
2,4-DINITROPHENOL	1.2 U	1.2 U	1.1 U	.99 U	1.3 U	1 U	.95 UJ
2,4-DINITROTOLUENE	.46 U	.5 UJ	.42 U	.39 U	.53 U	.4 U	.38 U
2,6-DICHLOROPHENOL	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 UJ
2,6-DINITROTOLUENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
2-ACETYLAMINOFLUORENE	.46 U	.5 UJ	.42 U	.39 U	.53 UJ	.4 U	.38 U
2-CHLORONAPHTHALENE	.46 UJ	.5 U	.42 UJ	.39 UJ	.53 U	.4 UJ	.38 UJ
2-CHLOROPHENOL	.46 U	.5 U	.42 UJ	.39 UJ	.53 U	.4 UJ	.38 UJ
2-METHYLNAPHTHALENE	**.039 J**	**.033 J**	**.043 J**	.39 U	**.029 J**	**.2 J**	.38 U
2-METHYLPHENOL (O-CRESOL)	.46 UJ	.5 U	**R**	**R**	.53 U	**R**	.38 UJ
2-NAPHTHYLAMINE	.46 UJ	.5 UJ	.42 UJ	.39 UJ	.53 U	.4 UJ	.38 UJ
2-NITROANILINE	1.2 U	1.2 U	1.1 U	.99 U	1.3 U	1 U	.95 U
2-NITROPHENOL	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 UJ
2-PICOLINE (ALPHA-PICOLINE)	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
3,3'-DICHLOROBENZIDINE	.46 U	.5 U	**R**	**R**	.53 U	**R**	.38 U
3,3'-DIMETHYLBENZIDINE	.46 UJ	.5 U	.42 UJ	.39 UJ	.53 UJ	.4 UJ	.38 UJ
3-METHYLCHOLANTHRENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
3-NITROANILINE	1.2 U	1.2 UJ	1.1 UJ	.99 UJ	1.3 U	1 UJ	.95 U
4,6-DINITRO-2-METHYLPHENOL	1.2 U	1.2 U	1.1 U	.99 U	1.3 U	1 U	.95 UJ
4-AMINOBIPHENYL	.46 UJ	.5 U	.42 UJ	.39 UJ	.53 U	.4 UJ	.38 UJ
4-BROMOPHENYL PHENYL ETHER	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
4-CHLORO-3-METHYLPHENOL	.46 U	.5 U	.42 UJ	.39 UJ	.53 U	.4 UJ	.38 UJ

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T116	T116	T118	T118	T118	T120	T120
Location ID	BS000236	RB021162	BS000237	BS000238	RB021183	BS000239	BS000240
Date Collected	04/01/2002	11/12/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002
Depth (ft)	0.0-1.0	0.0-0.5	2.0-3.0	1.0-2.0	1.0-1.5	0.0-1.0	2.0-3.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
4-CHLOROANILINE	.46 U	.5 U	R	R	.53 U	R	.38 U
4-CHLOROPHENYL PHENYL ETHER	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
4-METHYLPHENOL	.46 U	.5 U	.42 UJ	.39 UJ	.53 U	.4 UJ	.38 UJ
4-NITROANILINE	1.2 U	1.2 UJ	1.1 UJ	.99 UJ	1.3 U	1 UJ	.95 U
4-NITROPHENOL	1.2 U	1.2 U	1.1 U	.99 U	1.3 U	1 U	.95 UJ
4-NITROQUINOLINE-1-OXIDE	R	R	R	R	R	R	R
5-NITRO-O-TOLUIDINE	.46 U	.5 UJ	.42 U	.39 U	.53 U	.4 U	.38 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.46 U	.5 U	.42 U	.39 U	.53 UJ	.4 U	.38 U
A,A-DIMETHYLPHENETHYLAMINE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
ACENAPHTHENE	**.029 J**	**.029 J**	.42 U	.39 U	**.37 J**	**.15 J**	.38 U
ACENAPTHYLENE	**.064 J**	**.026 J**	**.065 J**	.39 U	.53 U	**.42**	**.055 J**
ACETOPHENONE	**.026 J**	.5 U	.42 U	.39 U	.53 U	**.041 J**	.38 U
ANILINE	R	R	R	R	R	R	.95 UJ
ANTHRACENE	**.1 J**	**.12 J**	**.049 J**	.39 U	.53 U	**.79**	**.053 J**
ARAMITE	R	.5 UJ	R	R	.53 U	R	R
AZOBENZENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
BENZO(A)ANTHRACENE	**.66**	**.68**	**.24 J**	.39 U	**.046 J**	**4.7**	**.52**
BENZO(A)PYRENE	**.68**	**.79**	**.027 J**	.39 U	**.045 J**	**5.1 J**	**.53**
BENZO(B)FLUORANTHENE	**.91**	**.7**	**.24 J**	.39 U	.53 U	**5.2 J**	**.77**
BENZO(GHI)PERYLENE	**.38 J**	**.81 J**	.42 U	.39 U	**.033 J**	**1.8**	**.43**
BENZO(K)FLUORANTHENE	**1.1**	**.73**	**.2 J**	.39 U	.53 U	.4 U	**.72**
BENZYL ALCOHOL	.46 U	.5 UJ	.42 U	.39 U	.53 U	.4 U	.38 UJ
BIS(2-CHLOROETHOXY) METHANE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
BIS(2-CHLOROETHYL) ETHER	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
BIS(2-CHLOROISOPROPYL) ETHER	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
BIS(2-ETHYLHEXYL) PHTHALATE	**.056 J**	.5 U	.42 U	.39 U	.53 U	**.05 J**	**.02 J**
BUTYLBENZYLPHTHALATE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
CHLOROBENZILATE	.46 U	.5 UJ	.42 U	.39 U	.53 U	.4 U	.38 U
CHRYSENE	**.79**	**.78**	**.22 J**	.39 U	**.043 J**	**4.2**	**.69**
DIALLATE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
DIBENZO(A,H)ANTHRACENE	**.18 J**	**.2 J**	**.092 J**	.39 U	.53 UJ	**1.1**	**.16 J**
DIBENZOFURAN	**.048 J**	**.031 J**	.42 U	.39 U	**.037 J**	**.18 J**	.38 U
DIETHYL PHTHALATE	.46 U	.5 UJ	.42 U	.39 U	.53 U	.4 U	.38 U
DIMETHYL PHTHALATE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
DI-N-BUTYL PHTHALATE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
DI-N-OCTYL PHTHALATE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
DINOSEB	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
ETHYL METHANESULFONATE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T116	T116	T118	T118	T118	T120	T120
Location ID	BS000236	RB021162	BS000237	BS000238	RB021183	BS000239	BS000240
Date Collected	04/01/2002	11/12/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002
Depth (ft)	0.0-1.0	0.0-0.5	2.0-3.0	1.0-2.0	1.0-1.5	0.0-1.0	2.0-3.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
FLUORANTHENE	1.2	1.3	.34 J	.39 U	.063 J	5.4	1.1
FLUORENE	.034 J	.042 J	.42 U	.39 U	.47 J	.22 J	.022 J
HEXACHLOROBUTADIENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
HEXACHLOROCYCLOPENTADIENE	.46 U	.5 UJ	R	R	.53 UJ	R	.38 U
HEXACHLOROETHANE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
HEXACHLOROPROPENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
INDENO(1,2,3-C,D)PYRENE	.5	.73 J	.045 J	.39 U	.033 J	2.1	.47
ISOPHORONE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
ISOSAFROLE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
METHAPYRILENE	.46 U	.5 UJ	.42 U	.39 U	.53 UJ	.4 U	.38 U
METHYL METHANESULFONATE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
NAPHTHALENE	.14 J	.091 J	.095 J	.39 U	.34 J	.44	.069 J
NITROBENZENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
NITROSOMETHYLETHYLAMINE	.46 U	.5 U	.42 U	.39 UJ	.53 U	.4 U	.38 U
N-NITROSODIETHYLAMINE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
N-NITROSODIMETHYLAMINE	.46 U	.5 U	.42 UJ	.39 U	.53 U	.4 UJ	.38 U
N-NITROSO-DI-N-BUTYLAMINE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
N-NITROSO-DI-N-PROPYLAMINE	.46 U	.5 U	.42 UJ	.39 UJ	.53 U	.4 UJ	.38 U
N-NITROSODIPHENYLAMINE	.46 U	.5 U	.42 UJ	.39 UJ	.53 U	.4 UJ	.38 U
N-NITROSOMORPHOLINE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
N-NITROSOPIPERIDINE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
N-NITROSOPYRROLIDINE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
O-TOLUIDINE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
P-DIMETHYLAMINOAZOBENZENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
PENTACHLOROETHANE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
PENTACHLORONITROBENZENE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
PENTACHLOROPHENOL	1.2 U	1.2 UJ	1.1 U	.99 U	1.3 UJ	1 U	.95 UJ
PHENACETIN	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
PHENANTHRENE	.56	.52	.22 J	.39 U	.045 J	3	.41
PHENOL	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 UJ
P-PHENYLENEDIAMINE	.46 UJ	.5 UJ	.42 UJ	.39 UJ	.53 UJ	.4 UJ	.38 UJ
PRONAMIDE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
PYRENE	1	1.2 J	.1 J	.39 U	.075 J	8.3 J	.9
PYRIDINE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U
SAFROLE	.46 U	.5 U	.42 U	.39 U	.53 U	.4 U	.38 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T120	T122	T122	T122	T122	T124	T124
Location ID	RB021202	BS000241	BS000242	RB021221	RB021222	BS000243	BS000244
Date Collected	11/12/1998	04/01/2002	04/01/2002	11/12/1998	06/13/2000	04/01/2002	04/01/2002
Depth (ft)	1.0-1.5	1.0-2.0	0.0-1.0	0.0-0.5	4.0-4.5	2.0-3.0	1.0-2.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
APP IX SEMIVOLATILES							
1,2,4,5-TETRACHLOROBENZENE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
HEXACHLOROBENZENE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
PENTACHLOROBENZENE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
1,2,4-TRICHLOROBENZENE	3.5 U	.41 U	.067 J	1.5 U	.38 U	.36 U	.4 U
1,2-DICHLOROBENZENE	3.5 U	.41 U	.42 U	1.5 U	.38 UJ	.36 U	.4 U
1,3,5-TRINITROBENZENE	3.5 U	.41 U	.42 U	1.5 U	.38 UJ	.36 U	.4 U
1,3-DICHLOROBENZENE	3.5 U	.41 U	.42 U	1.5 U	.38 UJ	.36 U	.4 U
1,3-DINITROBENZENE	3.5 U	.41 U	.42 U	1.5 U	.38 UJ	.36 U	.4 U
1,4-DICHLOROBENZENE	3.5 U	.41 U	.045 J	1.5 U	.38 UJ	.36 U	.4 U
1,4-NAPHTHOQUINONE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
1-NAPHTHYLAMINE	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 U	.36 U	.4 UJ
2,3,4,6-TETRACHLOROPHENOL	3.5 U	.41 U	.42 U	1.5 U	.38 UJ	.36 U	1.6 UJ
2,4,5-TRICHLOROPHENOL	8.8 UJ	1 U	1.1 U	3.8 U	.95 U	.9 U	4 UJ
2,4,6-TRICHLOROPHENOL	3.5 UJ	.41 U	.42 U	1.5 U	.38 U	.36 U	1.6 UJ
2,4-DICHLOROPHENOL	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	1.6 UJ
2,4-DIMETHYLPHENOL	3.5 U	R	R	1.5 U	.38 U	R	1.6 UJ
2,4-DINITROPHENOL	8.8 U	1 U	1.1 U	3.8 U	.95 UJ	.9 U	4 UJ
2,4-DINITROTOLUENE	3.5 U	.41 U	.42 U	1.5 U	.38 UJ	.36 U	.4 U
2,6-DICHLOROPHENOL	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	1.6 UJ
2,6-DINITROTOLUENE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
2-ACETYLAMINOFLUORENE	3.5 UJ	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
2-CHLORONAPHTHALENE	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 U	.36 UJ	.4 UJ
2-CHLOROPHENOL	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 U	.36 UJ	1.6 UJ
2-METHYLNAPHTHALENE	.72 J	.045 J	.23 J	.11 J	.073 J	.066 J	1.6 UJ
2-METHYLPHENOL (O-CRESOL)	3.5 U	R	R	1.5 U	.38 U	R	1.6 UJ
2-NAPHTHYLAMINE	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 U	.36 U	.4 UJ
2-NITROANILINE	8.8 U	1 U	1.1 U	3.8 U	.95 U	.9 U	1 U
2-NITROPHENOL	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	1.6 UJ
2-PICOLINE (ALPHA-PICOLINE)	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
3,3'-DICHLOROBENZIDINE	3.5 UJ	R	R	1.5 U	.38 U	R	1.6 UJ
3,3'-DIMETHYLBENZIDINE	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 U	.36 U	.4 UJ
3-METHYLCHOLANTHRENE	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 U	.36 UJ	.4 U
3-NITROANILINE	8.8 U	1 UJ	1.1 UJ	3.8 U	.95 U	.9 UJ	1 UJ
4,6-DINITRO-2-METHYLPHENOL	8.8 U	1 U	1.1 U	3.8 U	.95 U	.9 U	4 UJ
4-AMINOBIPHENYL	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 UJ	.36 U	.4 UJ
4-BROMOPHENYL PHENYL ETHER	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
4-CHLORO-3-METHYLPHENOL	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 U	.36 UJ	1.6 UJ

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T120	T122	T122	T122	T122	T124	T124
Location ID	RB021202	BS000241	BS000242	RB021221	RB021222	BS000243	BS000244
Date Collected	11/12/1998	04/01/2002	04/01/2002	11/12/1998	06/13/2000	04/01/2002	04/01/2002
Depth (ft)	1.0-1.5	1.0-2.0	0.0-1.0	0.0-0.5	4.0-4.5	2.0-3.0	1.0-2.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
4-CHLOROANILINE	3.5 U	R	R	1.5 U	.38 U	R	1.6 UJ
4-CHLOROPHENYL PHENYL ETHER	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
4-METHYLPHENOL	.21 J	.41 UJ	.087 J	1.5 U	.38 U	.36 UJ	1.6 UJ
4-NITROANILINE	8.8 U	1 UJ	1.1 UJ	3.8 U	.95 UJ	.9 UJ	1 UJ
4-NITROPHENOL	8.8 UJ	1 U	1.1 U	3.8 U	.95 U	.9 U	4 UJ
4-NITROQUINOLINE-1-OXIDE	R	R	R	1.5 U	.38 U	R	R
5-NITRO-O-TOLUIDINE	3.5 U	.41 U	.42 U	1.5 U	.38 UJ	.36 U	.4 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 U	.36 UJ	.4 U
A,A-DIMETHYLPHENETHYLAMINE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
ACENAPHTHENE	5	.041 J	.18 J	.098 J	.068 J	.1 J	.32 J
ACENAPTHYLENE	3.5 U	.18 J	1.5	.16 J	.043 J	.26 J	.35 J
ACETOPHENONE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.028 J	1.6 UJ
ANILINE	R	R	R	3.8 U	R	R	4 UJ
ANTHRACENE	5.6	.23 J	1.4	.52 J	.42 J	.77	1.2 J
ARAMITE	3.5 U	R	R	1.5 U	.38 U	R	R
AZOBENZENE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
BENZO(A)ANTHRACENE	6.3	1.2	.42 U	3.7 J	.92	3.7	5.1 J
BENZO(A)PYRENE	4.5	1.4 J	9.7 J	4.4 J	.7 J	4.2 J	7 J
BENZO(B)FLUORANTHENE	2.8 J	2.4 J	10 J	3.5 J	.51	6.3 J	6.3 J
BENZO(GHI)PERYLENE	2.1 J	2.1 J	2.9 J	4.2 J	.33 J	2.2 J	1.6 J
BENZO(K)FLUORANTHENE	4.4	1.2 J	.42 UJ	3.9	.87	.36 UJ	7.3 J
BENZYL ALCOHOL	3.5 UJ	.41 U	.42 U	1.5 U	.38 U	.36 U	1.6 UJ
BIS(2-CHLOROETHOXY) METHANE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
BIS(2-CHLOROETHYL) ETHER	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
BIS(2-CHLOROISOPROPYL) ETHER	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
BIS(2-ETHYLHEXYL) PHTHALATE	3.5 U	.052 J	.2 J	4.6 U	.38 U	.026 J	1.6 UJ
BUTYLBENZYLPHTHALATE	3.5 U	.41 U	.063 J	.1 J	.38 U	.36 U	.4 UJ
CHLOROBENZILATE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
CHRYSENE	5.6	1.4	.42 U	4.4 J	.81	2.9	4.4 J
DIALLATE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
DIBENZO(A,H)ANTHRACENE	.83 J	.83 J	1.9 J	1.3 J	.14 J	1.1 J	.67 J
DIBENZOFURAN	4.6	.052 J	.22 J	.091 J	.1 J	.1 J	.19 J
DIETHYL PHTHALATE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.1 J
DIMETHYL PHTHALATE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
DI-N-BUTYL PHTHALATE	3.5 U	.41 U	.039 J	4.6 UJ	.38 U	.36 U	1.6 UJ
DI-N-OCTYL PHTHALATE	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 U	.36 UJ	.4 U
DINOSEB	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
ETHYL METHANESULFONATE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T120	T122	T122	T122	T122	T124	T124
Location ID	RB021202	BS000241	BS000242	RB021221	RB021222	BS000243	BS000244
Date Collected	11/12/1998	04/01/2002	04/01/2002	11/12/1998	06/13/2000	04/01/2002	04/01/2002
Depth (ft)	1.0-1.5	1.0-2.0	0.0-1.0	0.0-0.5	4.0-4.5	2.0-3.0	1.0-2.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
FLUORANTHENE	**10**	**1.8**	**14**	**7.5**	**1.4**	**5.3**	**4.8 J**
FLUORENE	**7.6**	.41 U	**.5**	**.14 J**	**.17 J**	**.2 J**	**.32 J**
HEXACHLOROBUTADIENE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
HEXACHLOROCYCLOPENTADIENE	3.5 U	**R**	**R**	1.5 U	.38 UJ	**R**	1.6 UJ
HEXACHLOROETHANE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
HEXACHLOROPROPENE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
INDENO(1,2,3-C,D)PYRENE	**2.6 J**	**1.8 J**	**3.6 J**	**3.7 J**	**.35 J**	**2.2 J**	**2 J**
ISOPHORONE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
ISOSAFROLE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
METHAPYRILENE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
METHYL METHANESULFONATE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
NAPHTHALENE	**.9 J**	**.12 J**	**.59**	**.3 J**	**.22 J**	**.18 J**	**.32 J**
NITROBENZENE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
NITROSOMETHYLETHYLAMINE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
N-NITROSODIETHYLAMINE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
N-NITROSODIMETHYLAMINE	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 U	.36 UJ	.4 UJ
N-NITROSO-DI-N-BUTYLAMINE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
N-NITROSO-DI-N-PROPYLAMINE	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 U	.36 UJ	.4 UJ
N-NITROSODIPHENYLAMINE	3.5 U	.41 UJ	.42 UJ	1.5 U	.38 U	.36 UJ	.4 UJ
N-NITROSOMORPHOLINE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
N-NITROSOPIPERIDINE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
N-NITROSOPYRROLIDINE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
O-TOLUIDINE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
P-DIMETHYLAMINOAZOBENZENE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
PENTACHLOROETHANE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
PENTACHLORONITROBENZENE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
PENTACHLOROPHENOL	8.8 UJ	1 U	1.1 U	3.8 U	**R**	.9 U	4 UJ
PHENACETIN	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
PHENANTHRENE	**19**	**1**	**8.1**	**2.6 J**	**.79**	**1.9**	**2.7 J**
PHENOL	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	1.6 UJ
P-PHENYLENEDIAMINE	3.5 UJ	.41 UJ	.42 UJ	1.5 U	.38 U	.36 UJ	.4 UJ
PRONAMIDE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
PYRENE	**9.5 J**	**2.8**	**26 J**	**9.6**	**1.3**	**5.2**	**6.6 J**
PYRIDINE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U
SAFROLE	3.5 U	.41 U	.42 U	1.5 U	.38 U	.36 U	.4 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T126	T126	T126	T128	T128	T128	T130
Location ID	BS000245	BS000246	RB021263	BS000247	BS000248	RB021282	RB021301
Date Collected	04/01/2002	04/01/2002	11/11/1998	04/01/2002	04/01/2002	11/11/1998	11/10/1998
Depth (ft)	0.0-1.0	2.0-3.0	1.0-1.5	1.0-2.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
APP IX SEMIVOLATILES							
1,2,4,5-TETRACHLOROBENZENE	.45 U	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
HEXACHLOROBENZENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
PENTACHLOROBENZENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
1,2,4-TRICHLOROBENZENE	.45 UJ	.39 U	2.2 J	.43 U	.46 U	.39 UJ	.43 UJ
1,2-DICHLOROBENZENE	.45 UJ	.39 U	4.9 UJ	.43 U	.46 U	.39 UJ	.43 UJ
1,3,5-TRINITROBENZENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
1,3-DICHLOROBENZENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
1,3-DINITROBENZENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
1,4-DICHLOROBENZENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
1,4-NAPHTHOQUINONE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
1-NAPHTHYLAMINE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 U
2,3,4,6-TETRACHLOROPHENOL	.45 UJ	.39 UJ	4.9 U	R	R	R	.43 U
2,4,5-TRICHLOROPHENOL	1.1 UJ	.99 UJ	12 UJ	R	R	R	1.1 U
2,4,6-TRICHLOROPHENOL	.45 UJ	.39 UJ	4.9 UJ	R	R	R	.43 U
2,4-DICHLOROPHENOL	.45 UJ	.39 UJ	4.9 UJ	R	R	R	.43 U
2,4-DIMETHYLPHENOL	.45 UJ	.39 UJ	4.9 UJ	4.3 UJ	R	R	.43 U
2,4-DINITROPHENOL	1.1 UJ	.99 UJ	12 U	R	R	R	1.1 U
2,4-DINITROTOLUENE	.45 UJ	.39 U	4.9 UJ	.43 U	.46 U	.39 UJ	.43 UJ
2,6-DICHLOROPHENOL	.45 UJ	.39 UJ	4.9 U	R	R	R	.43 U
2,6-DINITROTOLUENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
2-ACETYLAMINOFLUORENE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 U
2-CHLORONAPHTHALENE	.45 UJ	.39 UJ	4.9 UJ	.43 UJ	.46 UJ	.39 UJ	.43 UJ
2-CHLOROPHENOL	.45 UJ	.39 UJ	4.9 U	R	R	R	.43 U
2-METHYLNAPHTHALENE	.45 UJ	.39 U	1.3 J	.47	.17 J	.39 UJ	.038 J
2-METHYLPHENOL (O-CRESOL)	.45 UJ	.39 UJ	4.9 U	4.3 UJ	3.1 UJ	R	.43 U
2-NAPHTHYLAMINE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 U
2-NITROANILINE	1.1 UJ	.99 U	12 U	1.1 U	1.2 U	.98 U	1.1 U
2-NITROPHENOL	.45 UJ	.39 UJ	4.9 U	R	R	R	.43 U
2-PICOLINE (ALPHA-PICOLINE)	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
3,3'-DICHLOROBENZIDINE	.45 UJ	.39 UJ	4.9 U	4.3 UJ	3.1 UJ	.39 U	.43 U
3,3'-DIMETHYLBENZIDINE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 U
3-METHYLCHOLANTHRENE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 UJ
3-NITROANILINE	1.1 UJ	.99 UJ	12 U	1.1 UJ	1.2 UJ	.98 U	1.1 U
4,6-DINITRO-2-METHYLPHENOL	1.1 UJ	.99 UJ	12 U	R	R	R	1.1 U
4-AMINOBIPHENYL	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 U
4-BROMOPHENYL PHENYL ETHER	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
4-CHLORO-3-METHYLPHENOL	.45 UJ	.39 UJ	4.9 U	R	R	R	.43 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T126	T126	T126	T128	T128	T128	T130
Location ID	BS000245	BS000246	RB021263	BS000247	BS000248	RB021282	RB021301
Date Collected	04/01/2002	04/01/2002	11/11/1998	04/01/2002	04/01/2002	11/11/1998	11/10/1998
Depth (ft)	0.0-1.0	2.0-3.0	1.0-1.5	1.0-2.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
4-CHLOROANILINE	.45 UJ	.39 UJ	16 U	4.3 UJ	3.1 UJ	R	.43 U
4-CHLOROPHENYL PHENYL ETHER	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
4-METHYLPHENOL	.45 UJ	.39 UJ	.38 J	.23 J	R	R	.43 U
4-NITROANILINE	1.1 UJ	.99 UJ	12 UJ	1.1 UJ	1.2 UJ	.98 UJ	1.1 UJ
4-NITROPHENOL	1.1 UJ	.99 U	12 UJ	R	R	R	1.1 U
4-NITROQUINOLINE-1-OXIDE	R	R	16 U	R	R	R	.43 U
5-NITRO-O-TOLUIDINE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 UJ
A,A-DIMETHYLPHENETHYLAMINE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
ACENAPHTHENE	.04 J	.39 U	12 J	.89	.34 J	.04 J	.062 J
ACENAPTHYLENE	.087 J	.037 J	8.7 J	1.3	.64	.026 J	.031 J
ACETOPHENONE	.45 UJ	.39 U	4.9 U	.041 J	.066 J	.39 U	.43 U
ANILINE	1.1 UJ	.99 UJ	41 U	11 UJ	7.8 UJ	R	1.1 U
ANTHRACENE	.17 J	.061 J	32 J	3.4	1.5	.18 J	.17 J
ARAMITE	R	R	4.9 U	R	R	.39 U	.43 U
AZOBENZENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
BENZO(A)ANTHRACENE	.89 J	.21 J	31	12	7.8	.63	1.2
BENZO(A)PYRENE	1.2 J	.96 J	21 J	12	9.1 J	.49 J	1.5 J
BENZO(B)FLUORANTHENE	1.6 J	.72 J	13	16 J	14 J	.33 J	1.2 J
BENZO(GHI)PERYLENE	.45 J	3.1 J	10	2.5 J	3.6 J	.25 J	1.7 J
BENZO(K)FLUORANTHENE	1.8 J	.59 J	18	.43 UJ	.46 UJ	.54	1.3 J
BENZYL ALCOHOL	.45 UJ	.39 UJ	4.9 UJ	R	R	R	.43 U
BIS(2-CHLOROETHOXY) METHANE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
BIS(2-CHLOROETHYL) ETHER	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
BIS(2-CHLOROISOPROPYL) ETHER	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
BIS(2-ETHYLHEXYL) PHTHALATE	.45 UJ	.39 UJ	4.9 U	1.8 J	.45 J	.39 U	.43 J
BUTYLBENZYLPHTHALATE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.099 J	.39 U	.06 J
CHLOROBENZILATE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 U
CHRYSENE	.91 J	.28 J	25 J	11	7.2	.57 J	1.3 J
DIALLATE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
DIBENZO(A,H)ANTHRACENE	.12 J	1.6 J	4.2 J	1.9 J	2 J	.086 J	.35 J
DIBENZOFURAN	.036 J	.39 U	20 J	1.3	.26 J	.03 J	.036 J
DIETHYL PHTHALATE	.16 J	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
DIMETHYL PHTHALATE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
DI-N-BUTYL PHTHALATE	.45 UJ	.39 U	4.9 U	.05 J	.068 J	.39 U	.43 U
DI-N-OCTYL PHTHALATE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 U
DINOSEB	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
ETHYL METHANESULFONATE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T126	T126	T126	T128	T128	T128	T130
Location ID	BS000245	BS000246	RB021263	BS000247	BS000248	RB021282	RB021301
Date Collected	04/01/2002	04/01/2002	11/11/1998	04/01/2002	04/01/2002	11/11/1998	11/10/1998
Depth (ft)	0.0-1.0	2.0-3.0	1.0-1.5	1.0-2.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
FLUORANTHENE	**1.4 J**	**.26 J**	**53 J**	**23**	**10**	**1 J**	**2.2 J**
FLUORENE	**.043 J**	.39 U	**25**	**2**	**.45 J**	**.048 J**	**.073 J**
HEXACHLOROBUTADIENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
HEXACHLOROCYCLOPENTADIENE	.45 UJ	.39 UJ	4.9 U	4.3 UJ	3.1 UJ	.39 U	.43 U
HEXACHLOROETHANE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
HEXACHLOROPROPENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
INDENO(1,2,3-C,D)PYRENE	**.52 J**	**3.1 J**	**12**	**3.2 J**	**4.2 J**	**.28 J**	**1.6 J**
ISOPHORONE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
ISOSAFROLE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
METHAPYRILENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 UJ	.43 U
METHYL METHANESULFONATE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
NAPHTHALENE	**.096 J**	**.026 J**	**4.6 J**	**1.4**	**.57**	**.059 J**	**.1 J**
NITROBENZENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
NITROSOMETHYLETHYLAMINE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
N-NITROSODIETHYLAMINE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
N-NITROSODIMETHYLAMINE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 U
N-NITROSO-DI-N-BUTYLAMINE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
N-NITROSO-DI-N-PROPYLAMINE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 U
N-NITROSODIPHENYLAMINE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 U
N-NITROSOMORPHOLINE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
N-NITROSOPIPERIDINE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
N-NITROSOPYRROLIDINE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
O-TOLUIDINE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
P-DIMETHYLAMINOAZOBENZENE	.45 UJ	.39 UJ	4.9 U	.43 UJ	.46 UJ	.39 U	.43 U
PENTACHLOROETHANE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
PENTACHLORONITROBENZENE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
PENTACHLOROPHENOL	1.1 UJ	.99 UJ	12 U	R	R	R	1.1 U
PHENACETIN	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
PHENANTHRENE	**.64 J**	**.13 J**	**84 J**	**18**	**5.3**	**.38 J**	**.71 J**
PHENOL	.45 UJ	.39 UJ	4.9 U	R	R	R	.43 U
P-PHENYLENEDIAMINE	.45 UJ	.39 UJ	4.9 UJ	.43 UJ	.46 UJ	.39 UJ	.43 UJ
PRONAMIDE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
PYRENE	**1.8 J**	**.47 J**	**59 J**	**25**	**15**	**.92**	**3.2 J**
PYRIDINE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U
SAFROLE	.45 UJ	.39 U	4.9 U	.43 U	.46 U	.39 U	.43 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T110	T110	T110	T116
Location ID	BS000253	BS000254	RB021105	RB021164
Date Collected	04/02/2002	04/02/2002	11/10/1998	11/10/1998
Depth (ft)	0.0-1.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	East Riverbank	East Riverbank	East Riverbank	East Riverbank
Analyte				
APP IX SEMIVOLATILES				
1,2,4,5-TETRACHLOROBENZENE	.39 U	.38 U	3.9 U	.4 U
HEXACHLOROBENZENE	.39 U	.38 U	3.9 U	.4 U
PENTACHLOROBENZENE	.39 U	.38 U	3.9 U	.02 J
1,2,4-TRICHLOROBENZENE	.39 U	.38 U	3.9 UJ	.026 J
1,2-DICHLOROBENZENE	.39 U	.38 U	3.9 UJ	.4 UJ
1,3,5-TRINITROBENZENE	.39 U	.38 U	3.9 U	.4 U
1,3-DICHLOROBENZENE	.39 U	.38 U	3.9 U	.4 U
1,3-DINITROBENZENE	.39 U	.38 U	3.9 U	.4 U
1,4-DICHLOROBENZENE	.39 U	.38 U	3.9 U	.4 U
1,4-NAPHTHOQUINONE	.39 U	.38 U	3.9 U	.4 U
1-NAPHTHYLAMINE	.39 UJ	.38 UJ	3.9 U	.4 U
2,3,4,6-TETRACHLOROPHENOL	.39 U	R	3.9 U	R
2,4,5-TRICHLOROPHENOL	.98 U	R	9.9 UJ	R
2,4,6-TRICHLOROPHENOL	.39 U	R	3.9 UJ	R
2,4-DICHLOROPHENOL	.39 U	R	3.9 UJ	R
2,4-DIMETHYLPHENOL	R	3.8 UJ	3.9 UJ	R
2,4-DINITROPHENOL	.98 U	R	9.9 U	R
2,4-DINITROTOLUENE	.39 U	.38 U	3.9 UJ	.4 UJ
2,6-DICHLOROPHENOL	.39 U	R	3.9 U	R
2,6-DINITROTOLUENE	.39 U	.38 U	3.9 U	.4 U
2-ACETYLAMINOFLUORENE	.39 U	.38 U	3.9 U	.4 U
2-CHLORONAPHTHALENE	.39 UJ	.38 UJ	3.9 UJ	.4 UJ
2-CHLOROPHENOL	.39 UJ	R	3.9 U	R
2-METHYLNAPHTHALENE	.39 U	.054 J	3.9 UJ	.4 U
2-METHYLPHENOL (O-CRESOL)	R	3.8 UJ	3.9 U	R
2-NAPHTHYLAMINE	.39 UJ	.38 UJ	3.9 U	.4 U
2-NITROANILINE	.98 U	.97 U	9.9 U	1 U
2-NITROPHENOL	.39 U	R	3.9 U	R
2-PICOLINE (ALPHA-PICOLINE)	.39 U	.38 U	3.9 U	.4 U
3,3'-DICHLOROBENZIDINE	R	3.8 UJ	3.9 U	.4 U
3,3'-DIMETHYLBENZIDINE	.39 UJ	.38 UJ	3.9 U	.4 U
3-METHYLCHOLANTHRENE	.39 U	.38 U	3.9 U	.4 U
3-NITROANILINE	.98 UJ	.97 UJ	9.9 U	1 U
4,6-DINITRO-2-METHYLPHENOL	.98 U	R	9.9 U	R
4-AMINOBIPHENYL	.39 UJ	.38 UJ	3.9 U	.4 U
4-BROMOPHENYL PHENYL ETHER	.39 U	.38 U	3.9 U	.4 U
4-CHLORO-3-METHYLPHENOL	.39 UJ	R	3.9 U	R

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T110	T110	T110	T116
Location ID	BS000253	BS000254	RB021105	RB021164
Date Collected	04/02/2002	04/02/2002	11/10/1998	11/10/1998
Depth (ft)	0.0-1.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	East Riverbank	East Riverbank	East Riverbank	East Riverbank
Analyte				
4-CHLOROANILINE	R	3.8 UJ	R	.4 UJ
4-CHLOROPHENYL PHENYL ETHER	.39 U	.38 U	3.9 U	.4 U
4-METHYLPHENOL	.39 UJ	R	3.9 U	R
4-NITROANILINE	.98 UJ	.97 UJ	9.9 UJ	1 UJ
4-NITROPHENOL	.98 UJ	R	9.9 UJ	R
4-NITROQUINOLINE-1-OXIDE	R	R	R	R
5-NITRO-O-TOLUIDINE	.39 U	.38 U	3.9 U	.4 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.39 U	.38 U	3.9 U	.4 U
A,A-DIMETHYLPHENETHYLAMINE	.39 U	.38 U	3.9 U	.4 U
ACENAPHTHENE	**.02 J**	**.18 J**	**2.9 J**	.4 UJ
ACENAPTHYLENE	**.034 J**	**.065 J**	3.9 UJ	.4 UJ
ACETOPHENONE	.39 U	**.019 J**	3.9 U	.4 U
ANILINE	R	9.6 UJ	R	R
ANTHRACENE	**.05 J**	**.24 J**	**6.2 J**	**.033 J**
ARAMITE	R	R	3.9 U	.4 U
AZOBENZENE	.39 U	.38 U	3.9 U	.4 U
BENZO(A)ANTHRACENE	**.21 J**	**1.1**	**13**	**.22 J**
BENZO(A)PYRENE	**.2 J**	**.86**	**18 J**	**.27 J**
BENZO(B)FLUORANTHENE	**.29 J**	**1.6**	**7.5**	**.23 J**
BENZO(GHI)PERYLENE	**.12 J**	**.4**	**12**	**.3 J**
BENZO(K)FLUORANTHENE	**.31 J**	**1.4**	**9.9**	**.28 J**
BENZYL ALCOHOL	.39 U	R	3.9 UJ	R
BIS(2-CHLOROETHOXY) METHANE	.39 U	.38 U	3.9 U	.4 U
BIS(2-CHLOROETHYL) ETHER	.39 U	.38 U	3.9 U	.4 U
BIS(2-CHLOROISOPROPYL) ETHER	.39 U	.38 U	3.9 U	.4 U
BIS(2-ETHYLHEXYL) PHTHALATE	**.059 J**	**.18 J**	3.9 U	.4 U
BUTYLBENZYLPHTHALATE	.39 U	**.028 J**	3.9 U	.4 U
CHLOROBENZILATE	.39 U	.38 U	3.9 U	.4 U
CHRYSENE	**.28 J**	**1.3**	**13 J**	**.3 J**
DIALLATE	.39 U	.38 U	3.9 U	.4 U
DIBENZO(A,H)ANTHRACENE	**.051 J**	**.15 J**	**2.8 J**	**.066 J**
DIBENZOFURAN	**.018 J**	**.13 J**	3.9 UJ	.4 UJ
DIETHYL PHTHALATE	.39 U	.38 U	3.9 U	.4 U
DIMETHYL PHTHALATE	.39 U	.38 U	3.9 U	.4 U
DI-N-BUTYL PHTHALATE	.39 U	.38 U	3.9 U	.4 U
DI-N-OCTYL PHTHALATE	.39 U	.38 U	3.9 U	.4 U
DINOSEB	.39 U	.38 U	3.9 U	.4 U
ETHYL METHANESULFONATE	.39 U	.38 U	3.9 U	.4 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 2
Appendix IX Semivolatile Results
(Results are presented in part per million, ppm)

Transect	T110	T110	T110	T116
Location ID	BS000253	BS000254	RB021105	RB021164
Date Collected	04/02/2002	04/02/2002	11/10/1998	11/10/1998
Depth (ft)	0.0-1.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	East Riverbank	East Riverbank	East Riverbank	East Riverbank
Analyte				
FLUORANTHENE	**.53**	**2.5**	**16 J**	**.52 J**
FLUORENE	**.023 J**	**.16 J**	**1.3 J**	**.019 J**
HEXACHLOROBUTADIENE	.39 U	.38 U	3.9 U	.4 U
HEXACHLOROCYCLOPENTADIENE	**R**	3.8 UJ	3.9 U	.4 U
HEXACHLOROETHANE	.39 U	.38 U	3.9 U	.4 U
HEXACHLOROPROPENE	.39 U	.38 U	3.9 U	.4 U
INDENO(1,2,3-C,D)PYRENE	**.15 J**	**.49**	**9.6**	**.26 J**
ISOPHORONE	.39 U	.38 U	3.9 U	.4 U
ISOSAFROLE	.39 U	.38 U	3.9 U	.4 U
METHAPYRILENE	.39 U	.38 U	3.9 UJ	.4 U
METHYL METHANESULFONATE	.39 U	.38 U	3.9 U	.4 U
NAPHTHALENE	**.034 J**	**.14 J**	**1.7 J**	**.022 J**
NITROBENZENE	.39 U	.38 U	3.9 U	.4 U
NITROSOMETHYLETHYLAMINE	.39 U	.38 U	3.9 U	.4 U
N-NITROSODIETHYLAMINE	.39 U	.38 U	3.9 U	.4 U
N-NITROSODIMETHYLAMINE	.39 UJ	.38 UJ	3.9 U	.4 U
N-NITROSO-DI-N-BUTYLAMINE	.39 U	.38 U	3.9 U	.4 U
N-NITROSO-DI-N-PROPYLAMINE	.39 UJ	.38 UJ	3.9 U	.4 U
N-NITROSODIPHENYLAMINE	.39 UJ	.38 UJ	3.9 U	.4 U
N-NITROSOMORPHOLINE	.39 U	.38 U	3.9 U	.4 U
N-NITROSOPIPERIDINE	.39 U	.38 U	3.9 U	.4 U
N-NITROSOPYRROLIDINE	.39 U	.38 U	3.9 U	.4 U
O-TOLUIDINE	.39 U	.38 U	3.9 U	.4 U
P-DIMETHYLAMINOAZOBENZENE	.39 U	.38 U	3.9 U	.4 U
PENTACHLOROETHANE	.39 U	.38 U	3.9 U	.4 U
PENTACHLORONITROBENZENE	.39 U	.38 U	3.9 U	.4 U
PENTACHLOROPHENOL	.98 U	**R**	9.9 U	**R**
PHENACETIN	.39 U	.38 U	3.9 U	.4 U
PHENANTHRENE	**.3 J**	**2.1**	**8.7 J**	**.24 J**
PHENOL	.39 U	**R**	3.9 U	**R**
P-PHENYLENEDIAMINE	.39 UJ	.38 UJ	3.9 UJ	.4 UJ
PRONAMIDE	.39 U	.38 U	3.9 U	.4 U
PYRENE	**.54**	**3**	**26**	**.56 J**
PYRIDINE	.39 U	.38 U	3.9 U	.4 U
SAFROLE	.39 U	.38 U	3.9 U	.4 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within PCB remediation areas

TABLE 3
Summary of PCB UCL Evaluation to Determine Remediation Limits

Zone	Bank Position	Sample Depths (ft)	UCL Information			Remediation requirement
			Data Distribution	UCL	UCL Method	
Zone 1 (West Bank)	Low	0 - 3	Lognormal	8.24238	95% Chebyshev (MVUE)	All UCLs less than the 10 ppm cleanup level. Data indicates that No Remediation is necessary within the entire Zone.
	Mid	0 - 3	Normal	0.15488	95% Student's-t	
	High	0 - 3	Non-Parametric	1.00755 - 2.47967[t]	95% Standard Bootstrap 95% Bootstrap-t	
Zone 2a (West Bank)	Low	0 - 3	Lognormal	0.63376	99% Chebyshev (MVUE)	All UCLs less than the 10 ppm cleanup level. Data indicates that No Remediation is necessary within the entire Zone.
	Mid	0 - 3	Normal	0.16455	95% Student's-t	
	high	0 - 3	Non-Parametric	0.776271 - 3.044348[t]	95% Standard Bootstrap 95% Bootstrap-t	
Zone 2b (West Bank)	high	0 - 3	Normal	0.19905	95% Student's-t	The UCL result less than the 10 ppm cleanup level. Data indicates that No Remediation is necessary within the entire Zone.
Zone 2c (West Bank)	mid	0 - 3	Normal	17.24217	95% Student's-t	The UCL result for the data within 0-3 foot depth exceeded the cleanup level of 10 ppm. Additional calculations performed on 0-1ft and 1-3 ft depths. The 0-1 ft data set was too small to obtain a UCL result. The UCL results for the 1-3 ft depth are less than the 10 ppm cleanup level. Remediation in Zone 2c necessary within the 0-1 ft depth.
		0 - 1	Data Set Too Small Default to max PCB	22.00	Data Set Too Small Default to max PCB within the data set	
		1 - 3	Lognormal	7.87707	95% Chebyshev (MVUE)	
Zone 2d (West Bank)	mid	0 - 3	Normal	70.442255	95% Student's-t	The UCL result for the data within 0-3 foot depth exceeded the cleanup level of 10 ppm. The data sets for additional calculations for the 0-1ft and 1-3 ft depths did not have enough data to obtain UCL results therefore the 0-3 ft depth calculation was used to determine the remidiation depth. Remidiation necessary for the 0-3 ft depth in Zone 2d.
		0 - 1	Data Set Too Small Default to max PCB	2.40	Data Set Too Small Default to max PCB within the data set	
		1 - 3	Data Set Too Small Default to max PCB	100.00	Data Set Too Small Default to max PCB within the data set	

TABLE 3
Summary of PCB UCL Evaluation to Determine Remediation Limits

Zone	Bank Position	Sample Depths (ft)	UCL Information			Remediation requirement
			Data Distribution	UCL	UCL Method	
Zone 3a (West Bank)		0-3	Non-Parametric	17.27169 - 42.95441[t]	95% Standard Bootstrap 95% Bootstrap-t	The UCL result for the data within 0-3 foot depth exceeded the cleanup level of 10 ppm. Additional calculations performed on the 0-3 ft depth with one high PCB result (700 ppm) removed. The calculation with the 700 ppm PCB removed resulted with the UCL below the 10 ppm cleanup level. 0-3 ft depth Remediation necessary only within the area that contained the 700 ppm PCB result (hotspot). No Remediation is necessary within the rest of Zone 3a.
		0-3	Non-Parametric	6.708152 - 9.679984[t]	95% CLT 95% Bootstrap-t	
Zone 3 (West Bank)	mid	0 - 3	Normal	59.88685	95% Student's-t	The UCL result for the data within 0-3 foot depth exceeded the cleanup level of 10 ppm. Additional calculations for the 0-1ft and 1-3 ft depths were performed, again the results exceeded the cleanup level. Remidiation necessary for the 0-3 ft depth in the mid bank area in Zone 3.
		0 - 1	Normal	39.35817	95% Student's-t	
		1 - 3	Normal	99.69963	95% Student's-t	
	high	0 - 3	Lognormal	1.078952	95% H-UCL	The UCL result less than the 10 ppm cleanup level. Data indicates that No Remediation is necessary within the high bank of Zone 3.
Zone 4 (East Bank)	Low	0 - 3	Lognormal	22.001419	95% Chebyshev (MVUE)	The UCL result for the data within 0-3 foot depth exceeded the cleanup goal of 10 ppm. Additional calculations for the 0-1ft and 1-3 ft depths were performed. The 0-1ft result exeeded the cleanup goal, however the 1-3ft result was below the cleanup goal. Remidiation necessary for the 0-1 ft depth in the low bank area in Zone 4.
		0 - 1	Lognormal	171.34044	99% Chebyshev (MVUE)	
		1 - 3	Normal	2.687925	95% Student's-t	

TABLE 3
Summary of PCB UCL Evaluation to Determine Remediation Limits

Zone	Bank Position	Sample Depths (ft)	UCL Information			Remediation requirement
			Data Distribution	UCL	UCL Method	
Zone 4 (East Bank)	Mid	0 - 3	Lognormal	19.215549	95% Chebyshev (MVUE)	The UCL result for the data within 0-3 foot depth exceeded the cleanup level of 10 ppm. Additional calculations for the 0-1ft and 1-3 ft depths were performed. The 0-1ft result was below the cleanup level, however the 1-3ft result exceeded the cleanup level of 10 ppm. Remidiation necessary for the 0-3 ft depth in the mid bank area in Zone 4.
		0 - 1	Lognormal	7.4644046	95% Chebyshev (MVUE)	
		1 - 3	Lognormal	35.971884	95% Chebyshev (MVUE)	
	High	0 - 3	Lognormal	1.1071375	95% H-UCL	The UCL result less than the 10 ppm cleanup level. Data indicates that No Remediation is necessary within the high bank of Zone 4.
Zone 5 (East Bank)	mid	0 - 3	Lognormal	29.82203	95% Chebyshev (MVUE)	The UCL result for the data within 0-3 foot depth exceeded the cleanup goal of 10 ppm. Additional calculations for the 0-1ft and 1-3 ft depths were performed. The 0-1ft data set did not have enough data to obtain UCL results and the 1-3ft result exeeded the cleanup goal. Remidiation necessary for the 0-3 ft depth in the mid bank area in Zone 5.
		0 - 1	Data Set Too Small Default to max PCB	9.30	Data Set Too Small Default to max PCB within the data set	
		1 - 3	Lognormal	82.21741	99% Chebyshev (MVUE)	
	high	0 - 3	Lognormal	13,000.00	Result could not be obtained. Default to max PCB within the data set	The UCL results could not be obtained for the 0-3 ft depth. There was one high PCB result (13,000ppm) which caused this. Additional calculations were performed on the 0-1 ft and 1-3 ft depths. The 0-1 ft data set was too small to obtain a UCL result. Again for the 1-3 ft depth UCL result could not be calculated because of the 13,000 ppm PCB result, therefore decision was made to use the maximum PCB result within the data set as a default. Remidiation necessary for the 0-3 ft depth in the high bank area in Zone 5.
		0 - 1	Data Set Too Small Default to max PCB	100.00	Data Set Too Small Default to max PCB within the data set	
		1 - 3	Lognormal	13,000.00	Result could not be obtained. Default to max PCB within the data set	

TABLE 3
Summary of PCB UCL Evaluation to Determine Remediation Limits

Zone	Bank Position	Sample Depths (ft)	UCL Information			Remediation requirement
			Data Distribution	UCL	UCL Method	
Zone 6 (East Bank)	mid	0 - 3	Normal	48.98244	95% Student's-t	The UCL result for the data within 0-3 foot depth exceeded the cleanup goal of 10 ppm. Additional calculations for the 0-1ft and 1-3 ft depths were performed. The 0-1ft data set did not have enough data to obtain UCL results and the 1-3ft result exeeded the cleanup goal. Remidiation necessary for the 0-3 ft depth in the mid bank area in Zone 6.
		0 - 1	Data Set Too Small Default to max PCB	84.00	Data Set Too Small Default to max PCB within the data set	
		1 - 3	Normal	27.7842	95% Student's-t	
	high	0 - 3	Lognormal	0.702075	95% H-UCL	The UCL result less than the 10 ppm cleanup level. Data indicates that No Remediation is necessary within the high bank of Zone 6.
Zone 7 (East Bank)	mid/high	0 - 3	Non-Parametric	2.330401 - 4.090699[t]	95% Standard Bootstrap 95% Bootstrap-t	The UCL result less than the 10 ppm cleanup level. Data indicates that No Remediation is necessary within the mid/high bank area in Zone 7.

Notes:

[t] The minimum and maximum of five separate non parametric UCL calculations is presented

All non-detected PCB results were used at 1/2 detection limit

Duplicate sample results: If both sample results were non-detects, the higher result was used at its full detection limit. If both sample results were detects/hits, the results were averaged. If one sample result was a detect/hit and one a non-detect, the result with the detect/hit was used.

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T110	T114	T114	T114	T116	T116	T116
Location ID	RB021101	BS000233	BS000234	RB021143	BS000235	BS000235	BS000236
Date Collected	11/16/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002	04/01/2002
Depth (ft)	0.0-0.5	0.0-1.0	2.0-3.0	0.0-0.5	1.0-2.0	1.0-2.0	0.0-1.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
APP IX SEMIVOLATILES							
1,2,4,5-TETRACHLOROBENZENE	.33U	.7 UJ	.38 U	.33U	.46 U	.43 U	.44 U
HEXACHLOROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
PENTACHLOROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
1,2,4-TRICHLOROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
1,2-DICHLOROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 UJ
1,3,5-TRINITROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
1,3-DICHLOROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
1,3-DINITROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
1,4-DICHLOROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
1,4-NAPHTHOQUINONE	.33U	.7 U	.38 U	.33U	**.061 J**	.43 U	.44 U
1-NAPHTHYLAMINE	.33U	.7 U	.38 UJ	.33U	.46 UJ	.43 UJ	.44 UJ
2,3,4,6-TETRACHLOROPHENOL	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2,4,5-TRICHLOROPHENOL	.83U	1.8 U	.96 U	.83U	1.2 U	1.1 U	1.1 U
2,4,6-TRICHLOROPHENOL	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 UJ
2,4-DICHLOROPHENOL	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2,4-DIMETHYLPHENOL	.33U	R	R	.33U	R	R	R
2,4-DINITROPHENOL	.83U	1.8 U	.96 U	.83U	1.2 U	1.1 U	1.1 U
2,4-DINITROTOLUENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2,6-DICHLOROPHENOL	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2,6-DINITROTOLUENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2-ACETYLAMINOFLUORENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2-CHLORONAPHTHALENE	.33U	.7 UJ	.38 UJ	.33U	.46 UJ	.43 UJ	.44 UJ
2-CHLOROPHENOL	.33U	.7 UJ	.38 UJ	.33U	.46 U	.43 U	.44 UJ
2-METHYLNAPHTHALENE	.33U	.7 UJ	**.1 J**	.33U	.46 U	.43 U	**.21 J**
2-METHYLPHENOL (O-CRESOL)	.33U	R	R	.33U	.46 UJ	.43 UJ	R
2-NAPHTHYLAMINE	.33U	.7 U	.38 UJ	.33U	.46 UJ	.43 UJ	.44 UJ
2-NITROANILINE	.83U	1.8 U	.96 U	.83U	1.2 U	1.1 U	1.1 U
2-NITROPHENOL	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2-PICOLINE (ALPHA-PICOLINE)	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
3,3'-DICHLOROBENZIDINE	.33U	R	R	.33U	.46 U	.43 U	R
3,3'-DIMETHYLBENZIDINE	.33U	.7 U	.38 UJ	.33U	.46 UJ	.43 UJ	.44 UJ
3-METHYLCHOLANTHRENE	.33U	.7 UJ	.38 U	.33U	.46 U	.43 U	.44 U
3-NITROANILINE	.83U	1.8 UJ	.96 UJ	.83U	1.2 U	1.1 U	R
4,6-DINITRO-2-METHYLPHENOL	.83U	1.8 U	.96 U	.83U	1.2 U	1.1 U	1.1 U
4-AMINOBIPHENYL	.33U	.7 U	.38 UJ	.33U	.46 UJ	.43 UJ	.44 UJ
4-BROMOPHENYL PHENYL ETHER	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
4-CHLORO-3-METHYLPHENOL	.33U	.7 UJ	.38 UJ	.33U	.46 U	.43 U	.44 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T110	T114	T114	T114	T116	T116	T116
Location ID	RB021101	BS000233	BS000234	RB021143	BS000235	BS000235	BS000236
Date Collected	11/16/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002	04/01/2002
Depth (ft)	0.0-0.5	0.0-1.0	2.0-3.0	0.0-0.5	1.0-2.0	1.0-2.0	0.0-1.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
4-CHLOROANILINE	.33U	R	R	.33U	.46 U	.43 U	R
4-CHLOROPHENYL PHENYL ETHER	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
4-METHYLPHENOL	.33U	**.06 J**	.38 UJ	.33U	.46 U	.43 U	.44 UJ
4-NITROANILINE	.83U	1.8 UJ	.96 UJ	.83U	1.2 U	1.1 U	R
4-NITROPHENOL	.83U	1.8 U	.96 U	.83U	1.2 UJ	1.1 U	1.1 U
4-NITROQUINOLINE-1-OXIDE	.33U	R	R	.33U	R	R	R
5-NITRO-O-TOLUIDINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.33U	.7 UJ	.38 U	.33U	.46 U	.43 U	.44 U
A,A-DIMETHYLPHENETHYLAMINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
ACENAPHTHENE	.33U	.7 U	**.062 J**	.33U	.46 U	.43 U	**.062 J**
ACENAPTHYLENE	.33U	**.44 J**	**.42 J**	.33U	**.025 J**	**.024 J**	**.16 J**
ACETOPHENONE	.33U	**.049 J**	**.045 J**	.33U	.46 U	.43 U	**.026 J**
ANILINE	.83U	R	R	.83U	R	R	R
ANTHRACENE	.33U	**.094 J**	**.26 J**	.33U	**.041 J**	**.034 J**	**.16 J**
ARAMITE	.33U	R	R	.33U	R	R	R
AZOBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
BENZO(A)ANTHRACENE	.33U	**.072 J**	**1.9 J**	.33U	**.14 J**	**.15 J**	**.83**
BENZO(A)PYRENE	.33U	**.053 J**	**2 J**	.33U	**.16 J**	**.15 J**	**.93**
BENZO(B)FLUORANTHENE	.33U	**.078 J**	**2.4**	.33U	**.16 J**	**.18 J**	**1.4 J**
BENZO(GHI)PERYLENE	.33U	.7 UJ	**.85 J**	.33U	**.22 J**	**.29 J**	**.49**
BENZO(K)FLUORANTHENE	.33U	**.087 J**	.38 U	.33U	**.21 J**	**.25 J**	**1.2**
BENZYL ALCOHOL	.33U	.7 UJ	.38 U	.33U	.46 U	.43 U	.44 U
BIS(2-CHLOROETHOXY) METHANE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
BIS(2-CHLOROETHYL) ETHER	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
BIS(2-CHLOROISOPROPYL) ETHER	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
BIS(2-ETHYLHEXYL) PHTHALATE	.33U	**.5 J**	**.052 J**	.33U	**.031 J**	**.023 J**	**.029 J**
BUTYLBENZYLPHTHALATE	.33U	**.083 J**	.38 U	.33U	.46 U	.43 U	.44 U
CHLOROBENZILATE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
CHRYSENE	.33U	**.071 J**	**2.1 J**	.33U	**.16 J**	**.17 J**	**.94**
DIALLATE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
DIBENZO(A,H)ANTHRACENE	.33U	.7 UJ	**.72 J**	.33U	**.043 J**	**.049 J**	**.18 J**
DIBENZOFURAN	.33U	.7 U	**.072 J**	.33U	.46 U	.43 U	**.059 J**
DIETHYL PHTHALATE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
DIMETHYL PHTHALATE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
DI-N-BUTYL PHTHALATE	.33U	**.033 J**	.38 U	.33U	.46 U	.43 U	.44 U
DI-N-OCTYL PHTHALATE	.33U	.7 UJ	.38 U	.33U	.46 U	.43 U	.44 U
DINOSEB	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
ETHYL METHANESULFONATE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T110	T114	T114	T114	T116	T116	T116
Location ID	RB021101	BS000233	BS000234	RB021143	BS000235	BS000235	BS000236
Date Collected	11/16/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002	04/01/2002
Depth (ft)	0.0-0.5	0.0-1.0	2.0-3.0	0.0-0.5	1.0-2.0	1.0-2.0	0.0-1.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
FLUORANTHENE	.33U	**.035 J**	**2.9 J**	.33U	**.26 J**	**.25 J**	**1.5**
FLUORENE	.33U	.7 U	**.1 J**	.33U	.46 U	.43 U	**.088 J**
HEXACHLOROBUTADIENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
HEXACHLOROCYCLOPENTADIENE	.33U	R	R	.33U	.46 U	.43 U	R
HEXACHLOROETHANE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
HEXACHLOROPROPENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
INDENO(1,2,3-C,D)PYRENE	.33U	.7 UJ	**1.8 J**	.33U	**.21 J**	**.27 J**	**.56**
ISOPHORONE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
ISOSAFROLE	.33U	.7 UJ	.38 U	.33U	.46 U	.43 U	.44 U
METHAPYRILENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
METHYL METHANESULFONATE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
NAPHTHALENE	.33U	.7 U	**.22 J**	.33U	**.04 J**	**.055 J**	**.26 J**
NITROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
NITROSOMETHYLETHYLAMINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
N-NITROSODIETHYLAMINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
N-NITROSODIMETHYLAMINE	.33U	.7 UJ	.38 UJ	.33U	.46 U	.43 U	.44 U
N-NITROSO-DI-N-BUTYLAMINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
N-NITROSO-DI-N-PROPYLAMINE	.33U	.7 UJ	.38 UJ	.33U	.46 U	.43 U	.44 U
N-NITROSODIPHENYLAMINE	.33U	.7 UJ	.38 UJ	.33U	.46 U	.43 U	.44 UJ
N-NITROSOMORPHOLINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
N-NITROSOPIPERIDINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
N-NITROSOPYRROLIDINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
O-TOLUIDINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
P-DIMETHYLAMINOAZOBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
PENTACHLOROETHANE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
PENTACHLORONITROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
PENTACHLOROPHENOL	.83U	1.8 U	.96 U	.83U	1.2 U	1.1 U	R
PHENACETIN	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
PHENANTHRENE	.33U	.7 U	**1.4 J**	.33U	**.14 J**	**.14 J**	**.9**
PHENOL	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 UJ
P-PHENYLENEDIAMINE	.33U	.7 UJ	.38 UJ	.33U	.46 UJ	.43 UJ	.44 UJ
PRONAMIDE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
PYRENE	.33U	**.063 J**	**2.7**	.33U	**.26 J**	**.23 J**	**1.4**
PYRIDINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	R
SAFROLE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T116	T116	T118	T118	T118	T120	T120
Location ID	BS000236	RB021162	BS000237	BS000238	RB021183	BS000239	BS000240
Date Collected	04/01/2002	11/12/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002
Depth (ft)	0.0-1.0	0.0-0.5	2.0-3.0	1.0-2.0	1.0-1.5	0.0-1.0	2.0-3.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
APP IX SEMIVOLATILES							
1,2,4,5-TETRACHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
HEXACHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
PENTACHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,2,4-TRICHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,2-DICHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,3,5-TRINITROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,3-DICHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,3-DINITROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,4-DICHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,4-NAPHTHOQUINONE	**.079 J**	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1-NAPHTHYLAMINE	.46 UJ	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
2,3,4,6-TETRACHLOROPHENOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
2,4,5-TRICHLOROPHENOL	1.2 U	.83U	1.1 U	.99 U	.83U	1 U	.95 UJ
2,4,6-TRICHLOROPHENOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
2,4-DICHLOROPHENOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
2,4-DIMETHYLPHENOL	**R**	.33U	**R**	**R**	.33U	**R**	.38 UJ
2,4-DINITROPHENOL	1.2 U	.83U	1.1 U	.99 U	.83U	1 U	.95 UJ
2,4-DINITROTOLUENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
2,6-DICHLOROPHENOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
2,6-DINITROTOLUENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
2-ACETYLAMINOFLUORENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
2-CHLORONAPHTHALENE	.46 UJ	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
2-CHLOROPHENOL	.46 U	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
2-METHYLNAPHTHALENE	**.039 J**	.33U	**.043 J**	.39 U	.33U	**.2 J**	.38 U
2-METHYLPHENOL (O-CRESOL)	.46 UJ	.33U	**R**	**R**	.33U	**R**	.38 UJ
2-NAPHTHYLAMINE	.46 UJ	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
2-NITROANILINE	1.2 U	.83U	1.1 U	.99 U	.83U	1 U	.95 U
2-NITROPHENOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
2-PICOLINE (ALPHA-PICOLINE)	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
3,3'-DICHLOROBENZIDINE	.46 U	.33U	**R**	**R**	.33U	**R**	.38 U
3,3'-DIMETHYLBENZIDINE	.46 UJ	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
3-METHYLCHOLANTHRENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
3-NITROANILINE	1.2 U	.83U	1.1 UJ	.99 UJ	.83U	1 UJ	.95 U
4,6-DINITRO-2-METHYLPHENOL	1.2 U	.83U	1.1 U	.99 U	.83U	1 U	.95 UJ
4-AMINOBIPHENYL	.46 UJ	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
4-BROMOPHENYL PHENYL ETHER	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
4-CHLORO-3-METHYLPHENOL	.46 U	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T116	T116	T118	T118	T118	T120	T120
Location ID	BS000236	RB021162	BS000237	BS000238	RB021183	BS000239	BS000240
Date Collected	04/01/2002	11/12/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002
Depth (ft)	0.0-1.0	0.0-0.5	2.0-3.0	1.0-2.0	1.0-1.5	0.0-1.0	2.0-3.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
4-CHLOROANILINE	.46 U	.33U	R	R	.33U	R	.38 U
4-CHLOROPHENYL PHENYL ETHER	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
4-METHYLPHENOL	.46 U	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
4-NITROANILINE	1.2 U	.83U	1.1 UJ	.99 UJ	.83U	1 UJ	.95 U
4-NITROPHENOL	1.2 U	.83U	1.1 U	.99 U	.83U	1 U	.95 UJ
4-NITROQUINOLINE-1-OXIDE	R	.33U	R	R	.33U	R	R
5-NITRO-O-TOLUIDINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
A,A-DIMETHYLPHENETHYLAMINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
ACENAPHTHENE	**.029 J**	.33U	.42 U	.39 U	.33U	**.15 J**	.38 U
ACENAPTHYLENE	**.064 J**	.33U	**.065 J**	.39 U	.33U	**.42**	**.055 J**
ACETOPHENONE	**.026 J**	.33U	.42 U	.39 U	.33U	**.041 J**	.38 U
ANILINE	R	.83U	R	R	.83U	R	.95 UJ
ANTHRACENE	**.1 J**	.33U	**.049 J**	.39 U	.33U	**.79**	**.053 J**
ARAMITE	R	.33U	R	R	.33U	R	R
AZOBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
BENZO(A)ANTHRACENE	**.66**	.33U	**.24 J**	.39 U	.33U	**4.7**	**.52**
BENZO(A)PYRENE	**.68**	.33U	**.027 J**	.39 U	.33U	**5.1 J**	**.53**
BENZO(B)FLUORANTHENE	**.91**	.33U	**.24 J**	.39 U	.33U	**5.2 J**	**.77**
BENZO(GHI)PERYLENE	**.38 J**	.33U	.42 U	.39 U	.33U	**1.8**	**.43**
BENZO(K)FLUORANTHENE	**1.1**	.33U	**.2 J**	.39 U	.33U	.4 U	**.72**
BENZYL ALCOHOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
BIS(2-CHLOROETHOXY) METHANE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
BIS(2-CHLOROETHYL) ETHER	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
BIS(2-CHLOROISOPROPYL) ETHER	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
BIS(2-ETHYLHEXYL) PHTHALATE	**.056 J**	.33U	.42 U	.39 U	.33U	**.05 J**	**.02 J**
BUTYLBENZYLPHTHALATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
CHLOROBENZILATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
CHRYSENE	**.79**	.33U	**.22 J**	.39 U	.33U	**4.2**	**.69**
DIALLATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
DIBENZO(A,H)ANTHRACENE	**.18 J**	.33U	**.092 J**	.39 U	.33U	**1.1**	**.16 J**
DIBENZOFURAN	**.048 J**	.33U	.42 U	.39 U	.33U	**.18 J**	.38 U
DIETHYL PHTHALATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
DIMETHYL PHTHALATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
DI-N-BUTYL PHTHALATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
DI-N-OCTYL PHTHALATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
DINOSEB	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
ETHYL METHANESULFONATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T116	T116	T118	T118	T118	T120	T120
Location ID	BS000236	RB021162	BS000237	BS000238	RB021183	BS000239	BS000240
Date Collected	04/01/2002	11/12/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002
Depth (ft)	0.0-1.0	0.0-0.5	2.0-3.0	1.0-2.0	1.0-1.5	0.0-1.0	2.0-3.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
FLUORANTHENE	**1.2**	.33U	**.34 J**	.39 U	.33U	**5.4**	**1.1**
FLUORENE	**.034 J**	.33U	.42 U	.39 U	.33U	**.22 J**	**.022 J**
HEXACHLOROBUTADIENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
HEXACHLOROCYCLOPENTADIENE	.46 U	.33U	**R**	**R**	.33U	**R**	.38 U
HEXACHLOROETHANE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
HEXACHLOROPROPENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
INDENO(1,2,3-C,D)PYRENE	**.5**	.33U	**.045 J**	.39 U	.33U	**2.1**	**.47**
ISOPHORONE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
ISOSAFROLE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
METHAPYRILENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
METHYL METHANESULFONATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
NAPHTHALENE	**.14 J**	.33U	**.095 J**	.39 U	.33U	**.44**	**.069 J**
NITROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
NITROSOMETHYLETHYLAMINE	.46 U	.33U	.42 U	.39 UJ	.33U	.4 U	.38 U
N-NITROSODIETHYLAMINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
N-NITROSODIMETHYLAMINE	.46 U	.33U	.42 UJ	.39 U	.33U	.4 UJ	.38 U
N-NITROSO-DI-N-BUTYLAMINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
N-NITROSO-DI-N-PROPYLAMINE	.46 U	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 U
N-NITROSODIPHENYLAMINE	.46 U	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 U
N-NITROSOMORPHOLINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
N-NITROSOPIPERIDINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
N-NITROSOPYRROLIDINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
O-TOLUIDINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
P-DIMETHYLAMINOAZOBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
PENTACHLOROETHANE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
PENTACHLORONITROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
PENTACHLOROPHENOL	1.2 U	.83U	1.1 U	.99 U	.83U	1 U	.95 UJ
PHENACETIN	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
PHENANTHRENE	**.56**	.33U	**.22 J**	.39 U	.33U	**3**	**.41**
PHENOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
P-PHENYLENEDIAMINE	.46 UJ	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
PRONAMIDE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
PYRENE	**1**	.33U	**.1 J**	.39 U	.33U	**8.3 J**	**.9**
PYRIDINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
SAFROLE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T120	T122	T122	T122	T122	T124	T124
Location ID	RB021202	BS000241	BS000242	RB021221	RB021222	BS000243	BS000244
Date Collected	11/12/1998	04/01/2002	04/01/2002	11/12/1998	06/13/2000	04/01/2002	04/01/2002
Depth (ft)	1.0-1.5	1.0-2.0	0.0-1.0	0.0-0.5	4.0-4.5	2.0-3.0	1.0-2.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
APP IX SEMIVOLATILES							
1,2,4,5-TETRACHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
HEXACHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
PENTACHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
1,2,4-TRICHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
1,2-DICHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.4 U
1,3,5-TRINITROBENZENE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.4 U
1,3-DICHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.4 U
1,3-DINITROBENZENE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.4 U
1,4-DICHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.4 U
1,4-NAPHTHOQUINONE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
1-NAPHTHYLAMINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 U	.4 UJ
2,3,4,6-TETRACHLOROPHENOL	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	1.6 UJ
2,4,5-TRICHLOROPHENOL	.83U	1 U	.83U	.83U	.95 U	.9 U	4 UJ
2,4,6-TRICHLOROPHENOL	.33U	.41 U	.33U	.33U	.38 U	.36 U	1.6 UJ
2,4-DICHLOROPHENOL	.33U	.41 U	.33U	.33U	.38 U	.36 U	1.6 UJ
2,4-DIMETHYLPHENOL	.33U	**R**	.33U	.33U	.38 U	**R**	1.6 UJ
2,4-DINITROPHENOL	.83U	1 U	.83U	.83U	.95 UJ	.9 U	4 UJ
2,4-DINITROTOLUENE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.4 U
2,6-DICHLOROPHENOL	.33U	.41 U	.33U	.33U	.38 U	.36 U	1.6 UJ
2,6-DINITROTOLUENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
2-ACETYLAMINOFLUORENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
2-CHLORONAPHTHALENE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.4 UJ
2-CHLOROPHENOL	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	1.6 UJ
2-METHYLNAPHTHALENE	.33U	**.045 J**	.33U	.33U	**.073 J**	**.066 J**	1.6 UJ
2-METHYLPHENOL (O-CRESOL)	.33U	**R**	.33U	.33U	.38 U	**R**	1.6 UJ
2-NAPHTHYLAMINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 U	.4 UJ
2-NITROANILINE	.83U	1 U	.83U	.83U	.95 U	.9 U	1 U
2-NITROPHENOL	.33U	.41 U	.33U	.33U	.38 U	.36 U	1.6 UJ
2-PICOLINE (ALPHA-PICOLINE)	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
3,3'-DICHLOROBENZIDINE	.33U	**R**	.33U	.33U	.38 U	**R**	1.6 UJ
3,3'-DIMETHYLBENZIDINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 U	.4 UJ
3-METHYLCHOLANTHRENE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.4 U
3-NITROANILINE	.83U	1 UJ	.83U	.83U	.95 U	.9 UJ	1 UJ
4,6-DINITRO-2-METHYLPHENOL	.83U	1 U	.83U	.83U	.95 U	.9 U	4 UJ
4-AMINOBIPHENYL	.33U	.41 UJ	.33U	.33U	.38 UJ	.36 U	.4 UJ
4-BROMOPHENYL PHENYL ETHER	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
4-CHLORO-3-METHYLPHENOL	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	1.6 UJ

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T120	T122	T122	T122	T122	T124	T124
Location ID	RB021202	BS000241	BS000242	RB021221	RB021222	BS000243	BS000244
Date Collected	11/12/1998	04/01/2002	04/01/2002	11/12/1998	06/13/2000	04/01/2002	04/01/2002
Depth (ft)	1.0-1.5	1.0-2.0	0.0-1.0	0.0-0.5	4.0-4.5	2.0-3.0	1.0-2.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
4-CHLOROANILINE	.33U	R	.33U	.33U	.38 U	R	1.6 UJ
4-CHLOROPHENYL PHENYL ETHER	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
4-METHYLPHENOL	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	1.6 UJ
4-NITROANILINE	.83U	1 UJ	.83U	.83U	.95 UJ	.9 UJ	1 UJ
4-NITROPHENOL	.83U	1 U	.83U	.83U	.95 U	.9 U	4 UJ
4-NITROQUINOLINE-1-OXIDE	.33U	R	.33U	.33U	.38 U	R	R
5-NITRO-O-TOLUIDINE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.4 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.4 U
A,A-DIMETHYLPHENETHYLAMINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
ACENAPHTHENE	.33U	**.041 J**	.33U	.33U	**.068 J**	**.1 J**	**.32 J**
ACENAPTHYLENE	.33U	**.18 J**	.33U	.33U	**.043 J**	**.26 J**	**.35 J**
ACETOPHENONE	.33U	.41 U	.33U	.33U	.38 U	**.028 J**	1.6 UJ
ANILINE	.83U	R	.83U	.83U	R	R	4 UJ
ANTHRACENE	.33U	**.23 J**	.33U	.33U	**.42 J**	**.77**	**1.2 J**
ARAMITE	.33U	R	.33U	.33U	.38 U	R	R
AZOBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
BENZO(A)ANTHRACENE	.33U	**1.2**	.33U	.33U	**.92**	**3.7**	**5.1 J**
BENZO(A)PYRENE	.33U	**1.4 J**	.33U	.33U	**.7 J**	**4.2 J**	**7 J**
BENZO(B)FLUORANTHENE	.33U	**2.4 J**	.33U	.33U	**.51**	**6.3 J**	**6.3 J**
BENZO(GHI)PERYLENE	.33U	**2.1 J**	.33U	.33U	**.33 J**	**2.2 J**	**1.6 J**
BENZO(K)FLUORANTHENE	.33U	**1.2 J**	.33U	.33U	**.87**	.36 UJ	**7.3 J**
BENZYL ALCOHOL	.33U	.41 U	.33U	.33U	.38 U	.36 U	1.6 UJ
BIS(2-CHLOROETHOXY) METHANE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
BIS(2-CHLOROETHYL) ETHER	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
BIS(2-CHLOROISOPROPYL) ETHER	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
BIS(2-ETHYLHEXYL) PHTHALATE	.33U	**.052 J**	.33U	.33U	.38 U	**.026 J**	1.6 UJ
BUTYLBENZYLPHTHALATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 UJ
CHLOROBENZILATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
CHRYSENE	.33U	**1.4**	.33U	.33U	**.81**	**2.9**	**4.4 J**
DIALLATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
DIBENZO(A,H)ANTHRACENE	.33U	**.83 J**	.33U	.33U	**.14 J**	**1.1 J**	**.67 J**
DIBENZOFURAN	.33U	**.052 J**	.33U	.33U	**.1 J**	**.1 J**	**.19 J**
DIETHYL PHTHALATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.1 J
DIMETHYL PHTHALATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
DI-N-BUTYL PHTHALATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	1.6 UJ
DI-N-OCTYL PHTHALATE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.4 U
DINOSEB	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
ETHYL METHANESULFONATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T120	T122	T122	T122	T122	T124	T124
Location ID	RB021202	BS000241	BS000242	RB021221	RB021222	BS000243	BS000244
Date Collected	11/12/1998	04/01/2002	04/01/2002	11/12/1998	06/13/2000	04/01/2002	04/01/2002
Depth (ft)	1.0-1.5	1.0-2.0	0.0-1.0	0.0-0.5	4.0-4.5	2.0-3.0	1.0-2.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
FLUORANTHENE	.33U	**1.8**	.33U	.33U	**1.4**	**5.3**	**4.8 J**
FLUORENE	.33U	.41 U	.33U	.33U	**.17 J**	**.2 J**	**.32 J**
HEXACHLOROBUTADIENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
HEXACHLOROCYCLOPENTADIENE	.33U	**R**	.33U	.33U	.38 UJ	**R**	1.6 UJ
HEXACHLOROETHANE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
HEXACHLOROPROPENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
INDENO(1,2,3-C,D)PYRENE	.33U	**1.8 J**	.33U	.33U	**.35 J**	**2.2 J**	**2 J**
ISOPHORONE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
ISOSAFROLE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
METHAPYRILENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
METHYL METHANESULFONATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
NAPHTHALENE	.33U	**.12 J**	.33U	.33U	**.22 J**	**.18 J**	**.32 J**
NITROBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
NITROSOMETHYLETHYLAMINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
N-NITROSODIETHYLAMINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
N-NITROSODIMETHYLAMINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.4 UJ
N-NITROSO-DI-N-BUTYLAMINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
N-NITROSO-DI-N-PROPYLAMINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.4 UJ
N-NITROSODIPHENYLAMINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.4 UJ
N-NITROSOMORPHOLINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
N-NITROSOPIPERIDINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
N-NITROSOPYRROLIDINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
O-TOLUIDINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
P-DIMETHYLAMINOAZOBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
PENTACHLOROETHANE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
PENTACHLORONITROBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
PENTACHLOROPHENOL	.83U	1 U	.83U	.83U	**R**	.9 U	4 UJ
PHENACETIN	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
PHENANTHRENE	.33U	**1**	.33U	.33U	**.79**	**1.9**	**2.7 J**
PHENOL	.33U	.41 U	.33U	.33U	.38 U	.36 U	1.6 UJ
P-PHENYLENEDIAMINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.4 UJ
PRONAMIDE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
PYRENE	.33U	**2.8**	.33U	.33U	**1.3**	**5.2**	**6.6 J**
PYRIDINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U
SAFROLE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.4 U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T126	T126	T126	T128	T128	T128	T130
Location ID	BS000245	BS000246	RB021263	BS000247	BS000248	RB021282	RB021301
Date Collected	04/01/2002	04/01/2002	11/11/1998	04/01/2002	04/01/2002	11/11/1998	11/10/1998
Depth (ft)	0.0-1.0	2.0-3.0	1.0-1.5	1.0-2.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
APP IX SEMIVOLATILES							
1,2,4,5-TETRACHLOROBENZENE	.45 U	.39 U	.33U	.43 U	.33U	.33U	.33U
HEXACHLOROBENZENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
PENTACHLOROBENZENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
1,2,4-TRICHLOROBENZENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
1,2-DICHLOROBENZENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
1,3,5-TRINITROBENZENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
1,3-DICHLOROBENZENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
1,3-DINITROBENZENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
1,4-DICHLOROBENZENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
1,4-NAPHTHOQUINONE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
1-NAPHTHYLAMINE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
2,3,4,6-TETRACHLOROPHENOL	.45 UJ	.39 UJ	.33U	R	.33U	.33U	.33U
2,4,5-TRICHLOROPHENOL	1.1 UJ	.99 UJ	.83U	R	.83U	.83U	.83U
2,4,6-TRICHLOROPHENOL	.45 UJ	.39 UJ	.33U	R	.33U	.33U	.33U
2,4-DICHLOROPHENOL	.45 UJ	.39 UJ	.33U	R	.33U	.33U	.33U
2,4-DIMETHYLPHENOL	.45 UJ	.39 UJ	.33U	4.3 UJ	.33U	.33U	.33U
2,4-DINITROPHENOL	1.1 UJ	.99 UJ	.83U	R	.83U	.83U	.83U
2,4-DINITROTOLUENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
2,6-DICHLOROPHENOL	.45 UJ	.39 UJ	.33U	R	.33U	.33U	.33U
2,6-DINITROTOLUENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
2-ACETYLAMINOFLUORENE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
2-CHLORONAPHTHALENE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
2-CHLOROPHENOL	.45 UJ	.39 UJ	.33U	R	.33U	.33U	.33U
2-METHYLNAPHTHALENE	.45 UJ	.39 U	.33U	.47	.33U	.33U	.33U
2-METHYLPHENOL (O-CRESOL)	.45 UJ	.39 UJ	.33U	4.3 UJ	.33U	.33U	.33U
2-NAPHTHYLAMINE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
2-NITROANILINE	1.1 UJ	.99 U	.83U	1.1 U	.83U	.83U	.83U
2-NITROPHENOL	.45 UJ	.39 UJ	.33U	R	.33U	.33U	.33U
2-PICOLINE (ALPHA-PICOLINE)	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
3,3'-DICHLOROBENZIDINE	.45 UJ	.39 UJ	.33U	4.3 UJ	.33U	.33U	.33U
3,3'-DIMETHYLBENZIDINE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
3-METHYLCHOLANTHRENE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
3-NITROANILINE	1.1 UJ	.99 UJ	.83U	1.1 UJ	.83U	.83U	.83U
4,6-DINITRO-2-METHYLPHENOL	1.1 UJ	.99 UJ	.83U	R	.83U	.83U	.83U
4-AMINOBIPHENYL	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
4-BROMOPHENYL PHENYL ETHER	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
4-CHLORO-3-METHYLPHENOL	.45 UJ	.39 UJ	.33U	R	.33U	.33U	.33U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T126	T126	T126	T128	T128	T128	T130
Location ID	BS000245	BS000246	RB021263	BS000247	BS000248	RB021282	RB021301
Date Collected	04/01/2002	04/01/2002	11/11/1998	04/01/2002	04/01/2002	11/11/1998	11/10/1998
Depth (ft)	0.0-1.0	2.0-3.0	1.0-1.5	1.0-2.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
4-CHLOROANILINE	.45 UJ	.39 UJ	.33U	4.3 UJ	.33U	.33U	.33U
4-CHLOROPHENYL PHENYL ETHER	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
4-METHYLPHENOL	.45 UJ	.39 UJ	.33U	**.23 J**	.33U	.33U	.33U
4-NITROANILINE	1.1 UJ	.99 UJ	.83U	1.1 UJ	.83U	.83U	.83U
4-NITROPHENOL	1.1 UJ	.99 U	.83U	R	.83U	.83U	.83U
4-NITROQUINOLINE-1-OXIDE	R	R	.33U	R	.33U	.33U	.33U
5-NITRO-O-TOLUIDINE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
A,A-DIMETHYLPHENETHYLAMINE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
ACENAPHTHENE	**.04 J**	.39 U	.33U	**.89**	.33U	.33U	.33U
ACENAPTHYLENE	**.087 J**	**.037 J**	.33U	**1.3**	.33U	.33U	.33U
ACETOPHENONE	.45 UJ	.39 U	.33U	**.041 J**	.33U	.33U	.33U
ANILINE	1.1 UJ	.99 UJ	.83U	11 UJ	.83U	.83U	.83U
ANTHRACENE	**.17 J**	**.061 J**	.33U	**3.4**	.33U	.33U	.33U
ARAMITE	R	R	.33U	R	.33U	.33U	.33U
AZOBENZENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
BENZO(A)ANTHRACENE	**.89 J**	**.21 J**	.33U	**12**	.33U	.33U	.33U
BENZO(A)PYRENE	**1.2 J**	**.96 J**	.33U	**12**	.33U	.33U	.33U
BENZO(B)FLUORANTHENE	**1.6 J**	**.72 J**	.33U	**16 J**	.33U	.33U	.33U
BENZO(GHI)PERYLENE	**.45 J**	**3.1 J**	.33U	**2.5 J**	.33U	.33U	.33U
BENZO(K)FLUORANTHENE	**1.8 J**	**.59 J**	.33U	.43 UJ	.33U	.33U	.33U
BENZYL ALCOHOL	.45 UJ	.39 UJ	.33U	R	.33U	.33U	.33U
BIS(2-CHLOROETHOXY) METHANE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
BIS(2-CHLOROETHYL) ETHER	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
BIS(2-CHLOROISOPROPYL) ETHER	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
BIS(2-ETHYLHEXYL) PHTHALATE	.45 UJ	.39 UJ	.33U	**1.8 J**	.33U	.33U	.33U
BUTYLBENZYLPHTHALATE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
CHLOROBENZILATE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
CHRYSENE	**.91 J**	**.28 J**	.33U	**11**	.33U	.33U	.33U
DIALLATE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
DIBENZO(A,H)ANTHRACENE	**.12 J**	**1.6 J**	.33U	**1.9 J**	.33U	.33U	.33U
DIBENZOFURAN	**.036 J**	.39 U	.33U	**1.3**	.33U	.33U	.33U
DIETHYL PHTHALATE	**.16 J**	.39 U	.33U	.43 U	.33U	.33U	.33U
DIMETHYL PHTHALATE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
DI-N-BUTYL PHTHALATE	.45 UJ	.39 U	.33U	**.05 J**	.33U	.33U	.33U
DI-N-OCTYL PHTHALATE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
DINOSEB	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
ETHYL METHANESULFONATE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T126	T126	T126	T128	T128	T128	T130
Location ID	BS000245	BS000246	RB021263	BS000247	BS000248	RB021282	RB021301
Date Collected	04/01/2002	04/01/2002	11/11/1998	04/01/2002	04/01/2002	11/11/1998	11/10/1998
Depth (ft)	0.0-1.0	2.0-3.0	1.0-1.5	1.0-2.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
FLUORANTHENE	**1.4 J**	**.26 J**	.33U	**23**	.33U	.33U	.33U
FLUORENE	**.043 J**	.39 U	.33U	**2**	.33U	.33U	.33U
HEXACHLOROBUTADIENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
HEXACHLOROCYCLOPENTADIENE	.45 UJ	.39 UJ	.33U	4.3 UJ	.33U	.33U	.33U
HEXACHLOROETHANE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
HEXACHLOROPROPENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
INDENO(1,2,3-C,D)PYRENE	**.52 J**	**3.1 J**	.33U	**3.2 J**	.33U	.33U	.33U
ISOPHORONE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
ISOSAFROLE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
METHAPYRILENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
METHYL METHANESULFONATE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
NAPHTHALENE	**.096 J**	**.026 J**	.33U	**1.4**	.33U	.33U	.33U
NITROBENZENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
NITROSOMETHYLETHYLAMINE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
N-NITROSODIETHYLAMINE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
N-NITROSODIMETHYLAMINE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
N-NITROSO-DI-N-BUTYLAMINE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
N-NITROSO-DI-N-PROPYLAMINE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
N-NITROSODIPHENYLAMINE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
N-NITROSOMORPHOLINE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
N-NITROSOPIPERIDINE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
N-NITROSOPYRROLIDINE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
O-TOLUIDINE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
P-DIMETHYLAMINOAZOBENZENE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
PENTACHLOROETHANE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
PENTACHLORONITROBENZENE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
PENTACHLOROPHENOL	1.1 UJ	.99 UJ	.83U	R	.83U	.83U	.83U
PHENACETIN	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
PHENANTHRENE	**.64 J**	**.13 J**	.33U	**18**	.33U	.33U	.33U
PHENOL	.45 UJ	.39 UJ	.33U	R	.33U	.33U	.33U
P-PHENYLENEDIAMINE	.45 UJ	.39 UJ	.33U	.43 UJ	.33U	.33U	.33U
PRONAMIDE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
PYRENE	**1.8 J**	**.47 J**	.33U	**25**	.33U	.33U	.33U
PYRIDINE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U
SAFROLE	.45 UJ	.39 U	.33U	.43 U	.33U	.33U	.33U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T110	T110	T110	T116
Location ID	BS000253	BS000254	RB021105	RB021164
Date Collected	04/02/2002	04/02/2002	11/10/1998	11/10/1998
Depth (ft)	0.0-1.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	East Riverbank	East Riverbank	East Riverbank	East Riverbank
Analyte				
APP IX SEMIVOLATILES				
1,2,4,5-TETRACHLOROBENZENE	.39 U	.33U	3.9 U	.33U
HEXACHLOROBENZENE	.39 U	.33U	3.9 U	.33U
PENTACHLOROBENZENE	.39 U	.33U	3.9 U	.33U
1,2,4-TRICHLOROBENZENE	.39 U	.33U	3.9 UJ	.33U
1,2-DICHLOROBENZENE	.39 U	.33U	3.9 UJ	.33U
1,3,5-TRINITROBENZENE	.39 U	.33U	3.9 U	.33U
1,3-DICHLOROBENZENE	.39 U	.33U	3.9 U	.33U
1,3-DINITROBENZENE	.39 U	.33U	3.9 U	.33U
1,4-DICHLOROBENZENE	.39 U	.33U	3.9 U	.33U
1,4-NAPHTHOQUINONE	.39 U	.33U	3.9 U	.33U
1-NAPHTHYLAMINE	.39 UJ	.33U	3.9 U	.33U
2,3,4,6-TETRACHLOROPHENOL	.39 U	.33U	3.9 U	.33U
2,4,5-TRICHLOROPHENOL	.98 U	.83U	9.9 UJ	.83U
2,4,6-TRICHLOROPHENOL	.39 U	.33U	3.9 UJ	.33U
2,4-DICHLOROPHENOL	.39 U	.33U	3.9 UJ	.33U
2,4-DIMETHYLPHENOL	R	.33U	3.9 UJ	.33U
2,4-DINITROPHENOL	.98 U	.83U	9.9 U	.83U
2,4-DINITROTOLUENE	.39 U	.33U	3.9 UJ	.33U
2,6-DICHLOROPHENOL	.39 U	.33U	3.9 U	.33U
2,6-DINITROTOLUENE	.39 U	.33U	3.9 U	.33U
2-ACETYLAMINOFLUORENE	.39 U	.33U	3.9 U	.33U
2-CHLORONAPHTHALENE	.39 UJ	.33U	3.9 UJ	.33U
2-CHLOROPHENOL	.39 UJ	.33U	3.9 U	.33U
2-METHYLNAPHTHALENE	.39 U	.33U	3.9 UJ	.33U
2-METHYLPHENOL (O-CRESOL)	R	.33U	3.9 U	.33U
2-NAPHTHYLAMINE	.39 UJ	.33U	3.9 U	.33U
2-NITROANILINE	.98 U	.83U	9.9 U	.83U
2-NITROPHENOL	.39 U	.33U	3.9 U	.33U
2-PICOLINE (ALPHA-PICOLINE)	.39 U	.33U	3.9 U	.33U
3,3'-DICHLOROBENZIDINE	R	.33U	3.9 U	.33U
3,3'-DIMETHYLBENZIDINE	.39 UJ	.33U	3.9 U	.33U
3-METHYLCHOLANTHRENE	.39 U	.33U	3.9 U	.33U
3-NITROANILINE	.98 UJ	.83U	9.9 U	.83U
4,6-DINITRO-2-METHYLPHENOL	.98 U	.83U	9.9 U	.83U
4-AMINOBIPHENYL	.39 UJ	.33U	3.9 U	.33U
4-BROMOPHENYL PHENYL ETHER	.39 U	.33U	3.9 U	.33U
4-CHLORO-3-METHYLPHENOL	.39 UJ	.33U	3.9 U	.33U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T110	T110	T110	T116
Location ID	BS000253	BS000254	RB021105	RB021164
Date Collected	04/02/2002	04/02/2002	11/10/1998	11/10/1998
Depth (ft)	0.0-1.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	East Riverbank	East Riverbank	East Riverbank	East Riverbank
Analyte				
4-CHLOROANILINE	R	.33U	R	.33U
4-CHLOROPHENYL PHENYL ETHER	.39 U	.33U	3.9 U	.33U
4-METHYLPHENOL	.39 UJ	.33U	3.9 U	.33U
4-NITROANILINE	.98 UJ	.83U	9.9 UJ	.83U
4-NITROPHENOL	.98 UJ	.83U	9.9 UJ	.83U
4-NITROQUINOLINE-1-OXIDE	R	.33U	R	.33U
5-NITRO-O-TOLUIDINE	.39 U	.33U	3.9 U	.33U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.39 U	.33U	3.9 U	.33U
A,A-DIMETHYLPHENETHYLAMINE	.39 U	.33U	3.9 U	.33U
ACENAPHTHENE	.02 J	.33U	2.9 J	.33U
ACENAPTHYLENE	.034 J	.33U	3.9 UJ	.33U
ACETOPHENONE	.39 U	.33U	3.9 U	.33U
ANILINE	R	.83U	R	.83U
ANTHRACENE	.05 J	.33U	6.2 J	.33U
ARAMITE	R	.33U	3.9 U	.33U
AZOBENZENE	.39 U	.33U	3.9 U	.33U
BENZO(A)ANTHRACENE	.21 J	.33U	13	.33U
BENZO(A)PYRENE	.2 J	.33U	18 J	.33U
BENZO(B)FLUORANTHENE	.29 J	.33U	7.5	.33U
BENZO(GHI)PERYLENE	.12 J	.33U	12	.33U
BENZO(K)FLUORANTHENE	.31 J	.33U	9.9	.33U
BENZYL ALCOHOL	.39 U	.33U	3.9 UJ	.33U
BIS(2-CHLOROETHOXY) METHANE	.39 U	.33U	3.9 U	.33U
BIS(2-CHLOROETHYL) ETHER	.39 U	.33U	3.9 U	.33U
BIS(2-CHLOROISOPROPYL) ETHER	.39 U	.33U	3.9 U	.33U
BIS(2-ETHYLHEXYL) PHTHALATE	.059 J	.33U	3.9 U	.33U
BUTYLBENZYLPHTHALATE	.39 U	.33U	3.9 U	.33U
CHLOROBENZILATE	.39 U	.33U	3.9 U	.33U
CHRYSENE	.28 J	.33U	13 J	.33U
DIALLATE	.39 U	.33U	3.9 U	.33U
DIBENZO(A,H)ANTHRACENE	.051 J	.33U	2.8 J	.33U
DIBENZOFURAN	.018 J	.33U	3.9 UJ	.33U
DIETHYL PHTHALATE	.39 U	.33U	3.9 U	.33U
DIMETHYL PHTHALATE	.39 U	.33U	3.9 U	.33U
DI-N-BUTYL PHTHALATE	.39 U	.33U	3.9 U	.33U
DI-N-OCTYL PHTHALATE	.39 U	.33U	3.9 U	.33U
DINOSEB	.39 U	.33U	3.9 U	.33U
ETHYL METHANESULFONATE	.39 U	.33U	3.9 U	.33U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 4
Appendix IX Semivolatile Results
Post-PCB Remediation
(Results are presented in parts per million, ppm)

Transect	T110	T110	T110	T116
Location ID	BS000253	BS000254	RB021105	RB021164
Date Collected	04/02/2002	04/02/2002	11/10/1998	11/10/1998
Depth (ft)	0.0-1.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	East Riverbank	East Riverbank	East Riverbank	East Riverbank
Analyte				
FLUORANTHENE	**.53**	.33U	**16 J**	.33U
FLUORENE	**.023 J**	.33U	**1.3 J**	.33U
HEXACHLOROBUTADIENE	.39 U	.33U	3.9 U	.33U
HEXACHLOROCYCLOPENTADIENE	**R**	.33U	3.9 U	.33U
HEXACHLOROETHANE	.39 U	.33U	3.9 U	.33U
HEXACHLOROPROPENE	.39 U	.33U	3.9 U	.33U
INDENO(1,2,3-C,D)PYRENE	**.15 J**	.33U	**9.6**	.33U
ISOPHORONE	.39 U	.33U	3.9 U	.33U
ISOSAFROLE	.39 U	.33U	3.9 U	.33U
METHAPYRILENE	.39 U	.33U	3.9 UJ	.33U
METHYL METHANESULFONATE	.39 U	.33U	3.9 U	.33U
NAPHTHALENE	**.034 J**	.33U	**1.7 J**	.33U
NITROBENZENE	.39 U	.33U	3.9 U	.33U
NITROSOMETHYLETHYLAMINE	.39 U	.33U	3.9 U	.33U
N-NITROSODIETHYLAMINE	.39 U	.33U	3.9 U	.33U
N-NITROSODIMETHYLAMINE	.39 UJ	.33U	3.9 U	.33U
N-NITROSO-DI-N-BUTYLAMINE	.39 U	.33U	3.9 U	.33U
N-NITROSO-DI-N-PROPYLAMINE	.39 UJ	.33U	3.9 U	.33U
N-NITROSODIPHENYLAMINE	.39 UJ	.33U	3.9 U	.33U
N-NITROSOMORPHOLINE	.39 U	.33U	3.9 U	.33U
N-NITROSOPIPERIDINE	.39 U	.33U	3.9 U	.33U
N-NITROSOPYRROLIDINE	.39 U	.33U	3.9 U	.33U
O-TOLUIDINE	.39 U	.33U	3.9 U	.33U
P-DIMETHYLAMINOAZOBENZENE	.39 U	.33U	3.9 U	.33U
PENTACHLOROETHANE	.39 U	.33U	3.9 U	.33U
PENTACHLORONITROBENZENE	.39 U	.33U	3.9 U	.33U
PENTACHLOROPHENOL	.98 U	.83U	9.9 U	.83U
PHENACETIN	.39 U	.33U	3.9 U	.33U
PHENANTHRENE	**.3 J**	.33U	**8.7 J**	.33U
PHENOL	.39 U	.33U	3.9 U	.33U
P-PHENYLENEDIAMINE	.39 UJ	.33U	3.9 UJ	.33U
PRONAMIDE	.39 U	.33U	3.9 U	.33U
PYRENE	**.54**	.33U	**26**	.33U
PYRIDINE	.39 U	.33U	3.9 U	.33U
SAFROLE	.39 U	.33U	3.9 U	.33U

U - Non-detects UJ - Non-detects at estimated detection limits J - Detect at estimated value R - Rejected value
Highlighted are results located within SVOC remediation areas

TABLE 5
Appendix IX Semivolatile Constituents Summary
Post-PCB Remediation
(Results are presented in part per million, ppm)

Appendix IX+3 Constituent	Maximum	USEPA Region 9 Residential PRG	Constituent Retained	Arithmetic Average	MCP Method S-2 Standard	Constituent Exceeds Method 1 Standard?
East Riverbank						
ACENAPHTHENE	2.9	2600	no	---	---	---
ACENAPTHYLENE	0.034	55	no	---	---	---
ANTHRACENE	6.2	14000	no	---	---	---
BENZO(A)ANTHRACENE	13	0.56	yes	3.4	1.0	yes
BENZO(A)PYRENE	18	0.056	yes	4.6	0.7	yes
BENZO(B)FLUORANTHENE	7.5	0.56	yes	2.0	1.0	yes
BENZO(GHI)PERYLENE	12	55	no	---	---	---
BENZO(K)FLUORANTHENE	9.9	5.6	yes	2.6	10.0	no
BIS(2-ETHYLHEXYL) PHTHALATE	0.059	32	no	---	---	---
CHRYSENE	13	56	no	---	---	---
DIBENZO(A,H)ANTHRACENE	2.8	0.056	yes	0.8	0.7	yes
DIBENZOFURAN	0.018	210	no	---	---	---
FLUORANTHENE	16	2000	no	---	---	---
FLUORENE	1.3	1800	no	---	---	---
INDENO(1,2,3-C,D)PYRENE	9.6	0.56	yes	2.5	1.0	yes
NAPHTHALENE	1.7	55	no	---	---	---
PHENANTHRENE	8.7	55	no	---	---	---
PYRENE	26	1500	no	---	---	---
West Riverbank						
1,4-NAPHTHOQUINONE	0.079	0.1*	no	---	---	---
2-METHYLNAPHTHALENE	0.47	55	no	---	---	---
4-METHYLPHENOL	0.23	270	no	---	---	---
ACENAPHTHENE	0.89	2600	no	---	---	---
ACENAPTHYLENE	1.3	55	no	---	---	---
ACETOPHENONE	0.049	0.49	no	---	---	---
ANTHRACENE	3.4	14000	no	---	---	---
BENZO(A)ANTHRACENE	12	0.56	yes	1.3	1.0	yes
BENZO(A)PYRENE	12	0.056	yes	1.5	0.7	yes
BENZO(B)FLUORANTHENE	16	0.56	yes	1.8	1.0	yes
BENZO(GHI)PERYLENE	3.1	55	no	---	---	

TABLE 5
Appendix IX Semivolatile Constituents Summary
Post-PCB Remediation
(Results are presented in part per million, ppm)

Appendix IX+3 Constituent	Maximum	USEPA Region 9 Residential PRG	Constituent Retained	Arithmetic Average	MCP Method S-2 Standard	Constituent Exceeds Method 1 Standard?
BENZO(K)FLUORANTHENE	7.3	5.6	yes	0.7	10.0	no
BIS(2-ETHYLHEXYL) PHTHALATE	1.8	32	no	---	---	---
BUTYLBENZYLPHTHALATE	0.083	930	no	---	---	---
CHRYSENE	11	56	no	---	---	---
DIBENZO(A,H)ANTHRACENE	1.9	0.056	yes	0.4	0.7	no
DIBENZOFURAN	1.3	210	no	---	---	---
DIETHYL PHTHALATE	0.16	44000	no	---	---	---
DI-N-BUTYL PHTHALATE	0.05	5500	no	---	---	---
FLUORANTHENE	23	2000	no	---	---	---
FLUOENE	2	1800	no	---	---	---
INDENO(1,2,3-C,D)PYRENE	3.2	0.56	yes	0.8	1.0	no
NAPHTHALENE	1.4	55	no	---	---	---
PHENANTHRENE	18	55	no	---	---	---
PYRENE	25	1500	no	---	---	---

Notes:

* - USEPA Region 9 Residential PRG and MCP Method S-2 Standard not available for this constituent, EPA selected 0.1ppm as a PRG

All non-detected PCB results were used at 1/2 detection limit

Duplicate sample results: If both sample results were non-detects, the higher result was used at its full detection limit. If both sample results were detects/hits, the results were averaged. If one sample result was a detect/hit and one a non-detect, the result with the detect/hit was used.

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T110	T114	T114	T114	T116	T116	T116
Location ID	RB021101	BS000233	BS000234	RB021143	BS000235	BS000235	BS000236
Date Collected	11/16/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002	04/01/2002
Depth (ft)	0.0-0.5	0.0-1.0	2.0-3.0	0.0-0.5	1.0-2.0	1.0-2.0	0.0-1.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
APP IX SEMIVOLATILES							
1,2,4,5-TETRACHLOROBENZENE	.33U	.7 UJ	.38 U	.33U	.46 U	.43 U	.44 U
HEXACHLOROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
PENTACHLOROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
1,2,4-TRICHLOROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
1,2-DICHLOROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 UJ
1,3,5-TRINITROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
1,3-DICHLOROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
1,3-DINITROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
1,4-DICHLOROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
1,4-NAPHTHOQUINONE	.33U	.7 U	.38 U	.33U	**.061 J**	.43 U	.44 U
1-NAPHTHYLAMINE	.33U	.7 U	.38 UJ	.33U	.46 UJ	.43 UJ	.44 UJ
2,3,4,6-TETRACHLOROPHENOL	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2,4,5-TRICHLOROPHENOL	.83U	1.8 U	.96 U	.83U	1.2 U	1.1 U	1.1 U
2,4,6-TRICHLOROPHENOL	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 UJ
2,4-DICHLOROPHENOL	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2,4-DIMETHYLPHENOL	.33U	R	R	.33U	R	R	R
2,4-DINITROPHENOL	.83U	1.8 U	.96 U	.83U	1.2 U	1.1 U	1.1 U
2,4-DINITROTOLUENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2,6-DICHLOROPHENOL	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2,6-DINITROTOLUENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2-ACETYLAMINOFLUORENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2-CHLORONAPHTHALENE	.33U	.7 UJ	.38 UJ	.33U	.46 UJ	.43 UJ	.44 UJ
2-CHLOROPHENOL	.33U	.7 UJ	.38 UJ	.33U	.46 U	.43 U	.44 UJ
2-METHYLNAPHTHALENE	.33U	.7 UJ	**.1 J**	.33U	.46 U	.43 U	**.21 J**
2-METHYLPHENOL (O-CRESOL)	.33U	R	R	.33U	.46 UJ	.43 UJ	R
2-NAPHTHYLAMINE	.33U	.7 U	.38 UJ	.33U	.46 UJ	.43 UJ	.44 UJ
2-NITROANILINE	.83U	1.8 U	.96 U	.83U	1.2 U	1.1 U	1.1 U
2-NITROPHENOL	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
2-PICOLINE (ALPHA-PICOLINE)	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
3,3'-DICHLOROBENZIDINE	.33U	R	R	.33U	.46 U	.43 U	R
3,3'-DIMETHYLBENZIDINE	.33U	.7 U	.38 UJ	.33U	.46 UJ	.43 UJ	.44 UJ
3-METHYLCHOLANTHRENE	.33U	.7 UJ	.38 U	.33U	.46 U	.43 U	.44 U
3-NITROANILINE	.83U	1.8 UJ	.96 UJ	.83U	1.2 U	1.1 U	R
4,6-DINITRO-2-METHYLPHENOL	.83U	1.8 U	.96 U	.83U	1.2 U	1.1 U	1.1 U
4-AMINOBIPHENYL	.33U	.7 U	.38 UJ	.33U	.46 UJ	.43 UJ	.44 UJ
4-BROMOPHENYL PHENYL ETHER	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
4-CHLORO-3-METHYLPHENOL	.33U	.7 UJ	.38 UJ	.33U	.46 U	.43 U	.44 U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T110	T114	T114	T114	T116	T116	T116
Location ID	RB021101	BS000233	BS000234	RB021143	BS000235	BS000235	BS000236
Date Collected	11/16/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002	04/01/2002
Depth (ft)	0.0-0.5	0.0-1.0	2.0-3.0	0.0-0.5	1.0-2.0	1.0-2.0	0.0-1.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
4-CHLOROANILINE	.33U	R	R	.33U	.46 U	.43 U	R
4-CHLOROPHENYL PHENYL ETHER	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
4-METHYLPHENOL	.33U	**.06 J**	.38 UJ	.33U	.46 U	.43 U	.44 UJ
4-NITROANILINE	.83U	1.8 UJ	.96 UJ	.83U	1.2 U	1.1 U	R
4-NITROPHENOL	.83U	1.8 U	.96 U	.83U	1.2 UJ	1.1 U	1.1 U
4-NITROQUINOLINE-1-OXIDE	.33U	R	R	.33U	R	R	R
5-NITRO-O-TOLUIDINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.33U	.7 UJ	.38 U	.33U	.46 U	.43 U	.44 U
A,A-DIMETHYLPHENETHYLAMINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
ACENAPHTHENE	.33U	.7 U	**.062 J**	.33U	.46 U	.43 U	**.062 J**
ACENAPTHYLENE	.33U	**.44 J**	**.42 J**	.33U	**.025 J**	**.024 J**	**.16 J**
ACETOPHENONE	.33U	**.049 J**	**.045 J**	.33U	.46 U	.43 U	**.026 J**
ANILINE	.83U	R	R	.83U	R	R	R
ANTHRACENE	.33U	**.094 J**	**.26 J**	.33U	**.041 J**	**.034 J**	**.16 J**
ARAMITE	.33U	R	R	.33U	R	R	R
AZOBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
BENZO(A)ANTHRACENE	.33U	**.072 J**	**1.9 J**	.33U	**.14 J**	**.15 J**	**.83**
BENZO(A)PYRENE	.33U	**.053 J**	**2 J**	.33U	**.16 J**	**.15 J**	**.93**
BENZO(B)FLUORANTHENE	.33U	**.078 J**	**2.4**	.33U	**.16 J**	**.18 J**	**1.4 J**
BENZO(GHI)PERYLENE	.33U	.7 UJ	**.85 J**	.33U	**.22 J**	**.29 J**	**.49**
BENZO(K)FLUORANTHENE	.33U	**.087 J**	.38 U	.33U	**.21 J**	**.25 J**	**1.2**
BENZYL ALCOHOL	.33U	.7 UJ	.38 U	.33U	.46 U	.43 U	.44 U
BIS(2-CHLOROETHOXY) METHANE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
BIS(2-CHLOROETHYL) ETHER	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
BIS(2-CHLOROISOPROPYL) ETHER	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
BIS(2-ETHYLHEXYL) PHTHALATE	.33U	**.5 J**	**.052 J**	.33U	**.031 J**	**.023 J**	**.029 J**
BUTYLBENZYLPHTHALATE	.33U	**.083 J**	.38 U	.33U	.46 U	.43 U	.44 U
CHLOROBENZILATE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
CHRYSENE	.33U	**.071 J**	**2.1 J**	.33U	**.16 J**	**.17 J**	**.94**
DIALLATE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
DIBENZO(A,H)ANTHRACENE	.33U	.7 UJ	**.72 J**	.33U	**.043 J**	**.049 J**	**.18 J**
DIBENZOFURAN	.33U	.7 U	**.072 J**	.33U	.46 U	.43 U	**.059 J**
DIETHYL PHTHALATE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
DIMETHYL PHTHALATE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
DI-N-BUTYL PHTHALATE	.33U	**.033 J**	.38 U	.33U	.46 U	.43 U	.44 U
DI-N-OCTYL PHTHALATE	.33U	.7 UJ	.38 U	.33U	.46 U	.43 U	.44 U
DINOSEB	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
ETHYL METHANESULFONATE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T110	T114	T114	T114	T116	T116	T116
Location ID	RB021101	BS000233	BS000234	RB021143	BS000235	BS000235	BS000236
Date Collected	11/16/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002	04/01/2002
Depth (ft)	0.0-0.5	0.0-1.0	2.0-3.0	0.0-0.5	1.0-2.0	1.0-2.0	0.0-1.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
FLUORANTHENE	.33U	**.035 J**	**2.9 J**	.33U	**.26 J**	**.25 J**	**1.5**
FLUORENE	.33U	.7 U	**.1 J**	.33U	.46 U	.43 U	**.088 J**
HEXACHLOROBUTADIENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
HEXACHLOROCYCLOPENTADIENE	.33U	R	R	.33U	.46 U	.43 U	R
HEXACHLOROETHANE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
HEXACHLOROPROPENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
INDENO(1,2,3-C,D)PYRENE	.33U	.7 UJ	**1.8 J**	.33U	**.21 J**	**.27 J**	**.56**
ISOPHORONE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
ISOSAFROLE	.33U	.7 UJ	.38 U	.33U	.46 U	.43 U	.44 U
METHAPYRILENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
METHYL METHANESULFONATE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
NAPHTHALENE	.33U	.7 U	**.22 J**	.33U	**.04 J**	**.055 J**	**.26 J**
NITROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
NITROSOMETHYLETHYLAMINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
N-NITROSODIETHYLAMINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
N-NITROSODIMETHYLAMINE	.33U	.7 UJ	.38 UJ	.33U	.46 U	.43 U	.44 U
N-NITROSO-DI-N-BUTYLAMINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
N-NITROSO-DI-N-PROPYLAMINE	.33U	.7 UJ	.38 UJ	.33U	.46 U	.43 U	.44 U
N-NITROSODIPHENYLAMINE	.33U	.7 UJ	.38 UJ	.33U	.46 U	.43 U	.44 UJ
N-NITROSOMORPHOLINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
N-NITROSOPIPERIDINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
N-NITROSOPYRROLIDINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
O-TOLUIDINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
P-DIMETHYLAMINOAZOBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
PENTACHLOROETHANE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
PENTACHLORONITROBENZENE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
PENTACHLOROPHENOL	.83U	1.8 U	.96 U	.83U	1.2 U	1.1 U	R
PHENACETIN	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
PHENANTHRENE	.33U	.7 U	**1.4 J**	.33U	**.14 J**	**.14 J**	**.9**
PHENOL	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 UJ
P-PHENYLENEDIAMINE	.33U	.7 UJ	.38 UJ	.33U	.46 UJ	.43 UJ	.44 UJ
PRONAMIDE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U
PYRENE	.33U	**.063 J**	**2.7**	.33U	**.26 J**	**.23 J**	**1.4**
PYRIDINE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	R
SAFROLE	.33U	.7 U	.38 U	.33U	.46 U	.43 U	.44 U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T116	T116	T118	T118	T118	T120	T120
Location ID	BS000236	RB021162	BS000237	BS000238	RB021183	BS000239	BS000240
Date Collected	04/01/2002	11/12/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002
Depth (ft)	0.0-1.0	0.0-0.5	2.0-3.0	1.0-2.0	1.0-1.5	0.0-1.0	2.0-3.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
APP IX SEMIVOLATILES							
1,2,4,5-TETRACHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
HEXACHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
PENTACHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,2,4-TRICHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,2-DICHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,3,5-TRINITROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,3-DICHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,3-DINITROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,4-DICHLOROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1,4-NAPHTHOQUINONE	**.079 J**	.33U	.42 U	.39 U	.33U	.4 U	.38 U
1-NAPHTHYLAMINE	.46 UJ	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
2,3,4,6-TETRACHLOROPHENOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
2,4,5-TRICHLOROPHENOL	1.2 U	.83U	1.1 U	.99 U	.83U	1 U	.95 UJ
2,4,6-TRICHLOROPHENOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
2,4-DICHLOROPHENOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
2,4-DIMETHYLPHENOL	R	.33U	R	R	.33U	R	.38 UJ
2,4-DINITROPHENOL	1.2 U	.83U	1.1 U	.99 U	.83U	1 U	.95 UJ
2,4-DINITROTOLUENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
2,6-DICHLOROPHENOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
2,6-DINITROTOLUENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
2-ACETYLAMINOFLUORENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
2-CHLORONAPHTHALENE	.46 UJ	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
2-CHLOROPHENOL	.46 U	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
2-METHYLNAPHTHALENE	**.039 J**	.33U	**.043 J**	.39 U	.33U	**.2 J**	.38 U
2-METHYLPHENOL (O-CRESOL)	.46 UJ	.33U	R	R	.33U	R	.38 UJ
2-NAPHTHYLAMINE	.46 UJ	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
2-NITROANILINE	1.2 U	.83U	1.1 U	.99 U	.83U	1 U	.95 U
2-NITROPHENOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
2-PICOLINE (ALPHA-PICOLINE)	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
3,3'-DICHLOROBENZIDINE	.46 U	.33U	R	R	.33U	R	.38 U
3,3'-DIMETHYLBENZIDINE	.46 UJ	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
3-METHYLCHOLANTHRENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
3-NITROANILINE	1.2 U	.83U	1.1 UJ	.99 UJ	.83U	1 UJ	.95 U
4,6-DINITRO-2-METHYLPHENOL	1.2 U	.83U	1.1 U	.99 U	.83U	1 U	.95 UJ
4-AMINOBIPHENYL	.46 UJ	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
4-BROMOPHENYL PHENYL ETHER	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
4-CHLORO-3-METHYLPHENOL	.46 U	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T116	T116	T118	T118	T118	T120	T120
Location ID	BS000236	RB021162	BS000237	BS000238	RB021183	BS000239	BS000240
Date Collected	04/01/2002	11/12/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002
Depth (ft)	0.0-1.0	0.0-0.5	2.0-3.0	1.0-2.0	1.0-1.5	0.0-1.0	2.0-3.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
4-CHLOROANILINE	.46 U	.33U	R	R	.33U	R	.38 U
4-CHLOROPHENYL PHENYL ETHER	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
4-METHYLPHENOL	.46 U	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
4-NITROANILINE	1.2 U	.83U	1.1 UJ	.99 UJ	.83U	1 UJ	.95 U
4-NITROPHENOL	1.2 U	.83U	1.1 U	.99 U	.83U	1 U	.95 UJ
4-NITROQUINOLINE-1-OXIDE	R	.33U	R	R	.33U	R	R
5-NITRO-O-TOLUIDINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
A,A-DIMETHYLPHENETHYLAMINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
ACENAPHTHENE	**.029 J**	.33U	.42 U	.39 U	.33U	**.15 J**	.38 U
ACENAPTHYLENE	**.064 J**	.33U	**.065 J**	.39 U	.33U	**.42**	**.055 J**
ACETOPHENONE	**.026 J**	.33U	.42 U	.39 U	.33U	**.041 J**	.38 U
ANILINE	R	.83U	R	R	.83U	R	.95 UJ
ANTHRACENE	**.1 J**	.33U	**.049 J**	.39 U	.33U	**.79**	**.053 J**
ARAMITE	R	.33U	R	R	.33U	R	R
AZOBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
BENZO(A)ANTHRACENE	**.66**	.33U	**.24 J**	.39 U	.33U	**4.7**	**.52**
BENZO(A)PYRENE	**.68**	.33U	**.027 J**	.39 U	.33U	**5.1 J**	**.53**
BENZO(B)FLUORANTHENE	**.91**	.33U	**.24 J**	.39 U	.33U	**5.2 J**	**.77**
BENZO(GHI)PERYLENE	**.38 J**	.33U	.42 U	.39 U	.33U	**1.8**	**.43**
BENZO(K)FLUORANTHENE	**1.1**	.33U	**.2 J**	.39 U	.33U	.4 U	**.72**
BENZYL ALCOHOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
BIS(2-CHLOROETHOXY) METHANE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
BIS(2-CHLOROETHYL) ETHER	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
BIS(2-CHLOROISOPROPYL) ETHER	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
BIS(2-ETHYLHEXYL) PHTHALATE	**.056 J**	.33U	.42 U	.39 U	.33U	**.05 J**	**.02 J**
BUTYLBENZYLPHTHALATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
CHLOROBENZILATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
CHRYSENE	**.79**	.33U	**.22 J**	.39 U	.33U	**4.2**	**.69**
DIALLATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
DIBENZO(A,H)ANTHRACENE	**.18 J**	.33U	**.092 J**	.39 U	.33U	**1.1**	**.16 J**
DIBENZOFURAN	**.048 J**	.33U	.42 U	.39 U	.33U	**.18 J**	.38 U
DIETHYL PHTHALATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
DIMETHYL PHTHALATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
DI-N-BUTYL PHTHALATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
DI-N-OCTYL PHTHALATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
DINOSEB	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
ETHYL METHANESULFONATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T116	T116	T118	T118	T118	T120	T120
Location ID	BS000236	RB021162	BS000237	BS000238	RB021183	BS000239	BS000240
Date Collected	04/01/2002	11/12/1998	04/01/2002	04/01/2002	11/12/1998	04/01/2002	04/01/2002
Depth (ft)	0.0-1.0	0.0-0.5	2.0-3.0	1.0-2.0	1.0-1.5	0.0-1.0	2.0-3.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
FLUORANTHENE	**1.2**	.33U	**.34 J**	.39 U	.33U	**5.4**	**1.1**
FLUORENE	**.034 J**	.33U	.42 U	.39 U	.33U	**.22 J**	**.022 J**
HEXACHLOROBUTADIENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
HEXACHLOROCYCLOPENTADIENE	.46 U	.33U	**R**	**R**	.33U	**R**	.38 U
HEXACHLOROETHANE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
HEXACHLOROPROPENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
INDENO(1,2,3-C,D)PYRENE	**.5**	.33U	**.045 J**	.39 U	.33U	**2.1**	**.47**
ISOPHORONE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
ISOSAFROLE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
METHAPYRILENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
METHYL METHANESULFONATE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
NAPHTHALENE	**.14 J**	.33U	**.095 J**	.39 U	.33U	**.44**	**.069 J**
NITROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
NITROSOMETHYLETHYLAMINE	.46 U	.33U	.42 U	.39 UJ	.33U	.4 U	.38 U
N-NITROSODIETHYLAMINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
N-NITROSODIMETHYLAMINE	.46 U	.33U	.42 UJ	.39 U	.33U	.4 UJ	.38 U
N-NITROSO-DI-N-BUTYLAMINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
N-NITROSO-DI-N-PROPYLAMINE	.46 U	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 U
N-NITROSODIPHENYLAMINE	.46 U	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 U
N-NITROSOMORPHOLINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
N-NITROSOPIPERIDINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
N-NITROSOPYRROLIDINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
O-TOLUIDINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
P-DIMETHYLAMINOAZOBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
PENTACHLOROETHANE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
PENTACHLORONITROBENZENE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
PENTACHLOROPHENOL	1.2 U	.83U	1.1 U	.99 U	.83U	1 U	.95 UJ
PHENACETIN	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
PHENANTHRENE	**.56**	.33U	**.22 J**	.39 U	.33U	**3**	**.41**
PHENOL	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 UJ
P-PHENYLENEDIAMINE	.46 UJ	.33U	.42 UJ	.39 UJ	.33U	.4 UJ	.38 UJ
PRONAMIDE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
PYRENE	**1**	.33U	**.1 J**	.39 U	.33U	**8.3 J**	**.9**
PYRIDINE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U
SAFROLE	.46 U	.33U	.42 U	.39 U	.33U	.4 U	.38 U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T120	T122	T122	T122	T122	T124	T124
Location ID	RB021202	BS000241	BS000242	RB021221	RB021222	BS000243	BS000244
Date Collected	11/12/1998	04/01/2002	04/01/2002	11/12/1998	06/13/2000	04/01/2002	04/01/2002
Depth (ft)	1.0-1.5	1.0-2.0	0.0-1.0	0.0-0.5	4.0-4.5	2.0-3.0	1.0-2.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
APP IX SEMIVOLATILES							
1,2,4,5-TETRACHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
HEXACHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
PENTACHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
1,2,4-TRICHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
1,2-DICHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.33U
1,3,5-TRINITROBENZENE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.33U
1,3-DICHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.33U
1,3-DINITROBENZENE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.33U
1,4-DICHLOROBENZENE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.33U
1,4-NAPHTHOQUINONE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
1-NAPHTHYLAMINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 U	.33U
2,3,4,6-TETRACHLOROPHENOL	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.33U
2,4,5-TRICHLOROPHENOL	.83U	1 U	.83U	.83U	.95 U	.9 U	.83U
2,4,6-TRICHLOROPHENOL	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
2,4-DICHLOROPHENOL	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
2,4-DIMETHYLPHENOL	.33U	R	.33U	.33U	.38 U	R	.33U
2,4-DINITROPHENOL	.83U	1 U	.83U	.83U	.95 UJ	.9 U	.83U
2,4-DINITROTOLUENE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.33U
2,6-DICHLOROPHENOL	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
2,6-DINITROTOLUENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
2-ACETYLAMINOFLUORENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
2-CHLORONAPHTHALENE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.33U
2-CHLOROPHENOL	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.33U
2-METHYLNAPHTHALENE	.33U	**.045 J**	.33U	.33U	**.073 J**	**.066 J**	.33U
2-METHYLPHENOL (O-CRESOL)	.33U	R	.33U	.33U	.38 U	R	.33U
2-NAPHTHYLAMINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 U	.33U
2-NITROANILINE	.83U	1 U	.83U	.83U	.95 U	.9 U	.83U
2-NITROPHENOL	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
2-PICOLINE (ALPHA-PICOLINE)	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
3,3'-DICHLOROBENZIDINE	.33U	R	.33U	.33U	.38 U	R	.33U
3,3'-DIMETHYLBENZIDINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 U	.33U
3-METHYLCHOLANTHRENE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.33U
3-NITROANILINE	.83U	1 UJ	.83U	.83U	.95 U	.9 UJ	.83U
4,6-DINITRO-2-METHYLPHENOL	.83U	1 U	.83U	.83U	.95 U	.9 U	.83U
4-AMINOBIPHENYL	.33U	.41 UJ	.33U	.33U	.38 UJ	.36 U	.33U
4-BROMOPHENYL PHENYL ETHER	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
4-CHLORO-3-METHYLPHENOL	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.33U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T120	T122	T122	T122	T122	T124	T124
Location ID	RB021202	BS000241	BS000242	RB021221	RB021222	BS000243	BS000244
Date Collected	11/12/1998	04/01/2002	04/01/2002	11/12/1998	06/13/2000	04/01/2002	04/01/2002
Depth (ft)	1.0-1.5	1.0-2.0	0.0-1.0	0.0-0.5	4.0-4.5	2.0-3.0	1.0-2.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
4-CHLOROANILINE	.33U	R	.33U	.33U	.38 U	R	.33U
4-CHLOROPHENYL PHENYL ETHER	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
4-METHYLPHENOL	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.33U
4-NITROANILINE	.83U	1 UJ	.83U	.83U	.95 UJ	.9 UJ	.83U
4-NITROPHENOL	.83U	1 U	.83U	.83U	.95 U	.9 U	.83U
4-NITROQUINOLINE-1-OXIDE	.33U	R	.33U	.33U	.38 U	R	.33U
5-NITRO-O-TOLUIDINE	.33U	.41 U	.33U	.33U	.38 UJ	.36 U	.33U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.33U
A,A-DIMETHYLPHENETHYLAMINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
ACENAPHTHENE	.33U	**.041 J**	.33U	.33U	**.068 J**	**.1 J**	.33U
ACENAPTHYLENE	.33U	**.18 J**	.33U	.33U	**.043 J**	**.26 J**	.33U
ACETOPHENONE	.33U	.41 U	.33U	.33U	.38 U	**.028 J**	.33U
ANILINE	.83U	R	.83U	.83U	R	R	.83U
ANTHRACENE	.33U	**.23 J**	.33U	.33U	**.42 J**	**.77**	.33U
ARAMITE	.33U	R	.33U	.33U	.38 U	R	.33U
AZOBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
BENZO(A)ANTHRACENE	.33U	**1.2**	.33U	.33U	**.92**	**3.7**	.33U
BENZO(A)PYRENE	.33U	**1.4 J**	.33U	.33U	**.7 J**	**4.2 J**	.33U
BENZO(B)FLUORANTHENE	.33U	**2.4 J**	.33U	.33U	**.51**	**6.3 J**	.33U
BENZO(GHI)PERYLENE	.33U	**2.1 J**	.33U	.33U	**.33 J**	**2.2 J**	.33U
BENZO(K)FLUORANTHENE	.33U	**1.2 J**	.33U	.33U	**.87**	.36 UJ	.33U
BENZYL ALCOHOL	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
BIS(2-CHLOROETHOXY) METHANE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
BIS(2-CHLOROETHYL) ETHER	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
BIS(2-CHLOROISOPROPYL) ETHER	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
BIS(2-ETHYLHEXYL) PHTHALATE	.33U	**.052 J**	.33U	.33U	.38 U	**.026 J**	.33U
BUTYLBENZYLPHTHALATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
CHLOROBENZILATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
CHRYSENE	.33U	**1.4**	.33U	.33U	**.81**	**2.9**	.33U
DIALLATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
DIBENZO(A,H)ANTHRACENE	.33U	**.83 J**	.33U	.33U	**.14 J**	**1.1 J**	.33U
DIBENZOFURAN	.33U	**.052 J**	.33U	.33U	**.1 J**	**.1 J**	.33U
DIETHYL PHTHALATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
DIMETHYL PHTHALATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
DI-N-BUTYL PHTHALATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
DI-N-OCTYL PHTHALATE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.33U
DINOSEB	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
ETHYL METHANESULFONATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T120	T122	T122	T122	T122	T124	T124
Location ID	RB021202	BS000241	BS000242	RB021221	RB021222	BS000243	BS000244
Date Collected	11/12/1998	04/01/2002	04/01/2002	11/12/1998	06/13/2000	04/01/2002	04/01/2002
Depth (ft)	1.0-1.5	1.0-2.0	0.0-1.0	0.0-0.5	4.0-4.5	2.0-3.0	1.0-2.0
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
FLUORANTHENE	.33U	**1.8**	.33U	.33U	**1.4**	**5.3**	.33U
FLUORENE	.33U	.41 U	.33U	.33U	**.17 J**	**.2 J**	.33U
HEXACHLOROBUTADIENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
HEXACHLOROCYCLOPENTADIENE	.33U	**R**	.33U	.33U	.38 UJ	**R**	.33U
HEXACHLOROETHANE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
HEXACHLOROPROPENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
INDENO(1,2,3-C,D)PYRENE	.33U	**1.8 J**	.33U	.33U	**.35 J**	**2.2 J**	.33U
ISOPHORONE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
ISOSAFROLE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
METHAPYRILENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
METHYL METHANESULFONATE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
NAPHTHALENE	.33U	**.12 J**	.33U	.33U	**.22 J**	**.18 J**	.33U
NITROBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
NITROSOMETHYLETHYLAMINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
N-NITROSODIETHYLAMINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
N-NITROSODIMETHYLAMINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.33U
N-NITROSO-DI-N-BUTYLAMINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
N-NITROSO-DI-N-PROPYLAMINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.33U
N-NITROSODIPHENYLAMINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.33U
N-NITROSOMORPHOLINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
N-NITROSOPIPERIDINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
N-NITROSOPYRROLIDINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
O-TOLUIDINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
P-DIMETHYLAMINOAZOBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
PENTACHLOROETHANE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
PENTACHLORONITROBENZENE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
PENTACHLOROPHENOL	.83U	1 U	.83U	.83U	**R**	.9 U	.83U
PHENACETIN	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
PHENANTHRENE	.33U	**1**	.33U	.33U	**.79**	**1.9**	.33U
PHENOL	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
P-PHENYLENEDIAMINE	.33U	.41 UJ	.33U	.33U	.38 U	.36 UJ	.33U
PRONAMIDE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
PYRENE	.33U	**2.8**	.33U	.33U	**1.3**	**5.2**	.33U
PYRIDINE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U
SAFROLE	.33U	.41 U	.33U	.33U	.38 U	.36 U	.33U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T126	T126	T126	T128	T128	T128	T130
Location ID	BS000245	BS000246	RB021263	BS000247	BS000248	RB021282	RB021301
Date Collected	04/01/2002	04/01/2002	11/11/1998	04/01/2002	04/01/2002	11/11/1998	11/10/1998
Depth (ft)	0.0-1.0	2.0-3.0	1.0-1.5	1.0-2.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
APP IX SEMIVOLATILES							
1,2,4,5-TETRACHLOROBENZENE	.45 U	.39 U	.33U	.33U	.33U	.33U	.33U
HEXACHLOROBENZENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
PENTACHLOROBENZENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
1,2,4-TRICHLOROBENZENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
1,2-DICHLOROBENZENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
1,3,5-TRINITROBENZENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
1,3-DICHLOROBENZENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
1,3-DINITROBENZENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
1,4-DICHLOROBENZENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
1,4-NAPHTHOQUINONE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
1-NAPHTHYLAMINE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
2,3,4,6-TETRACHLOROPHENOL	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
2,4,5-TRICHLOROPHENOL	1.1 UJ	.99 UJ	.83U	.83U	.83U	.83U	.83U
2,4,6-TRICHLOROPHENOL	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
2,4-DICHLOROPHENOL	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
2,4-DIMETHYLPHENOL	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
2,4-DINITROPHENOL	1.1 UJ	.99 UJ	.83U	.83U	.83U	.83U	.83U
2,4-DINITROTOLUENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
2,6-DICHLOROPHENOL	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
2,6-DINITROTOLUENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
2-ACETYLAMINOFLUORENE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
2-CHLORONAPHTHALENE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
2-CHLOROPHENOL	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
2-METHYLNAPHTHALENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
2-METHYLPHENOL (O-CRESOL)	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
2-NAPHTHYLAMINE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
2-NITROANILINE	1.1 UJ	.99 U	.83U	.83U	.83U	.83U	.83U
2-NITROPHENOL	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
2-PICOLINE (ALPHA-PICOLINE)	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
3,3'-DICHLOROBENZIDINE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
3,3'-DIMETHYLBENZIDINE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
3-METHYLCHOLANTHRENE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
3-NITROANILINE	1.1 UJ	.99 UJ	.83U	.83U	.83U	.83U	.83U
4,6-DINITRO-2-METHYLPHENOL	1.1 UJ	.99 UJ	.83U	.83U	.83U	.83U	.83U
4-AMINOBIPHENYL	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
4-BROMOPHENYL PHENYL ETHER	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
4-CHLORO-3-METHYLPHENOL	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T126	T126	T126	T128	T128	T128	T130
Location ID	BS000245	BS000246	RB021263	BS000247	BS000248	RB021282	RB021301
Date Collected	04/01/2002	04/01/2002	11/11/1998	04/01/2002	04/01/2002	11/11/1998	11/10/1998
Depth (ft)	0.0-1.0	2.0-3.0	1.0-1.5	1.0-2.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
4-CHLOROANILINE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
4-CHLOROPHENYL PHENYL ETHER	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
4-METHYLPHENOL	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
4-NITROANILINE	1.1 UJ	.99 UJ	.83U	.83U	.83U	.83U	.83U
4-NITROPHENOL	1.1 UJ	.99 U	.83U	.83U	.83U	.83U	.83U
4-NITROQUINOLINE-1-OXIDE	R	R	.33U	.33U	.33U	.33U	.33U
5-NITRO-O-TOLUIDINE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
A,A-DIMETHYLPHENETHYLAMINE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
ACENAPHTHENE	**.04 J**	.39 U	.33U	.33U	.33U	.33U	.33U
ACENAPTHYLENE	**.087 J**	**.037 J**	.33U	.33U	.33U	.33U	.33U
ACETOPHENONE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
ANILINE	1.1 UJ	.99 UJ	.83U	.83U	.83U	.83U	.83U
ANTHRACENE	**.17 J**	**.061 J**	.33U	.33U	.33U	.33U	.33U
ARAMITE	R	R	.33U	.33U	.33U	.33U	.33U
AZOBENZENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
BENZO(A)ANTHRACENE	**.89 J**	**.21 J**	.33U	.33U	.33U	.33U	.33U
BENZO(A)PYRENE	**1.2 J**	**.96 J**	.33U	.33U	.33U	.33U	.33U
BENZO(B)FLUORANTHENE	**1.6 J**	**.72 J**	.33U	.33U	.33U	.33U	.33U
BENZO(GHI)PERYLENE	**.45 J**	**3.1 J**	.33U	.33U	.33U	.33U	.33U
BENZO(K)FLUORANTHENE	**1.8 J**	**.59 J**	.33U	.33U	.33U	.33U	.33U
BENZYL ALCOHOL	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
BIS(2-CHLOROETHOXY) METHANE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
BIS(2-CHLOROETHYL) ETHER	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
BIS(2-CHLOROISOPROPYL) ETHER	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
BIS(2-ETHYLHEXYL) PHTHALATE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
BUTYLBENZYLPHTHALATE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
CHLOROBENZILATE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
CHRYSENE	**.91 J**	**.28 J**	.33U	.33U	.33U	.33U	.33U
DIALLATE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
DIBENZO(A,H)ANTHRACENE	**.12 J**	**1.6 J**	.33U	.33U	.33U	.33U	.33U
DIBENZOFURAN	**.036 J**	.39 U	.33U	.33U	.33U	.33U	.33U
DIETHYL PHTHALATE	**.16 J**	.39 U	.33U	.33U	.33U	.33U	.33U
DIMETHYL PHTHALATE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
DI-N-BUTYL PHTHALATE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
DI-N-OCTYL PHTHALATE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
DINOSEB	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
ETHYL METHANESULFONATE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T126	T126	T126	T128	T128	T128	T130
Location ID	BS000245	BS000246	RB021263	BS000247	BS000248	RB021282	RB021301
Date Collected	04/01/2002	04/01/2002	11/11/1998	04/01/2002	04/01/2002	11/11/1998	11/10/1998
Depth (ft)	0.0-1.0	2.0-3.0	1.0-1.5	1.0-2.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank	West Riverbank
Analyte							
FLUORANTHENE	**1.4 J**	**.26 J**	.33U	.33U	.33U	.33U	.33U
FLUORENE	**.043 J**	.39 U	.33U	.33U	.33U	.33U	.33U
HEXACHLOROBUTADIENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
HEXACHLOROCYCLOPENTADIENE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
HEXACHLOROETHANE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
HEXACHLOROPROPENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
INDENO(1,2,3-C,D)PYRENE	**.52 J**	**3.1 J**	.33U	.33U	.33U	.33U	.33U
ISOPHORONE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
ISOSAFROLE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
METHAPYRILENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
METHYL METHANESULFONATE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
NAPHTHALENE	**.096 J**	**.026 J**	.33U	.33U	.33U	.33U	.33U
NITROBENZENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
NITROSOMETHYLETHYLAMINE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
N-NITROSODIETHYLAMINE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
N-NITROSODIMETHYLAMINE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
N-NITROSO-DI-N-BUTYLAMINE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
N-NITROSO-DI-N-PROPYLAMINE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
N-NITROSODIPHENYLAMINE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
N-NITROSOMORPHOLINE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
N-NITROSOPIPERIDINE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
N-NITROSOPYRROLIDINE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
O-TOLUIDINE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
P-DIMETHYLAMINOAZOBENZENE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
PENTACHLOROETHANE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
PENTACHLORONITROBENZENE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
PENTACHLOROPHENOL	1.1 UJ	.99 UJ	.83U	.83U	.83U	.83U	.83U
PHENACETIN	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
PHENANTHRENE	**.64 J**	**.13 J**	.33U	.33U	.33U	.33U	.33U
PHENOL	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
P-PHENYLENEDIAMINE	.45 UJ	.39 UJ	.33U	.33U	.33U	.33U	.33U
PRONAMIDE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
PYRENE	**1.8 J**	**.47 J**	.33U	.33U	.33U	.33U	.33U
PYRIDINE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U
SAFROLE	.45 UJ	.39 U	.33U	.33U	.33U	.33U	.33U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T110	T110	T110	T116
Location ID	BS000253	BS000254	RB021105	RB021164
Date Collected	04/02/2002	04/02/2002	11/10/1998	11/10/1998
Depth (ft)	0.0-1.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	East Riverbank	East Riverbank	East Riverbank	East Riverbank
Analyte				
APP IX SEMIVOLATILES				
1,2,4,5-TETRACHLOROBENZENE	.39 U	.33U	.33U	.33U
HEXACHLOROBENZENE	.39 U	.33U	.33U	.33U
PENTACHLOROBENZENE	.39 U	.33U	.33U	.33U
1,2,4-TRICHLOROBENZENE	.39 U	.33U	.33U	.33U
1,2-DICHLOROBENZENE	.39 U	.33U	.33U	.33U
1,3,5-TRINITROBENZENE	.39 U	.33U	.33U	.33U
1,3-DICHLOROBENZENE	.39 U	.33U	.33U	.33U
1,3-DINITROBENZENE	.39 U	.33U	.33U	.33U
1,4-DICHLOROBENZENE	.39 U	.33U	.33U	.33U
1,4-NAPHTHOQUINONE	.39 U	.33U	.33U	.33U
1-NAPHTHYLAMINE	.39 UJ	.33U	.33U	.33U
2,3,4,6-TETRACHLOROPHENOL	.39 U	.33U	.33U	.33U
2,4,5-TRICHLOROPHENOL	.98 U	.83U	.83U	.83U
2,4,6-TRICHLOROPHENOL	.39 U	.33U	.33U	.33U
2,4-DICHLOROPHENOL	.39 U	.33U	.33U	.33U
2,4-DIMETHYLPHENOL	R	.33U	.33U	.33U
2,4-DINITROPHENOL	.98 U	.83U	.83U	.83U
2,4-DINITROTOLUENE	.39 U	.33U	.33U	.33U
2,6-DICHLOROPHENOL	.39 U	.33U	.33U	.33U
2,6-DINITROTOLUENE	.39 U	.33U	.33U	.33U
2-ACETYLAMINOFLUORENE	.39 U	.33U	.33U	.33U
2-CHLORONAPHTHALENE	.39 UJ	.33U	.33U	.33U
2-CHLOROPHENOL	.39 UJ	.33U	.33U	.33U
2-METHYLNAPHTHALENE	.39 U	.33U	.33U	.33U
2-METHYLPHENOL (O-CRESOL)	R	.33U	.33U	.33U
2-NAPHTHYLAMINE	.39 UJ	.33U	.33U	.33U
2-NITROANILINE	.98 U	.83U	.83U	.83U
2-NITROPHENOL	.39 U	.33U	.33U	.33U
2-PICOLINE (ALPHA-PICOLINE)	.39 U	.33U	.33U	.33U
3,3'-DICHLOROBENZIDINE	R	.33U	.33U	.33U
3,3'-DIMETHYLBENZIDINE	.39 UJ	.33U	.33U	.33U
3-METHYLCHOLANTHRENE	.39 U	.33U	.33U	.33U
3-NITROANILINE	.98 UJ	.83U	.83U	.83U
4,6-DINITRO-2-METHYLPHENOL	.98 U	.83U	.83U	.83U
4-AMINOBIPHENYL	.39 UJ	.33U	.33U	.33U
4-BROMOPHENYL PHENYL ETHER	.39 U	.33U	.33U	.33U
4-CHLORO-3-METHYLPHENOL	.39 UJ	.33U	.33U	.33U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T110	T110	T110	T116
Location ID	BS000253	BS000254	RB021105	RB021164
Date Collected	04/02/2002	04/02/2002	11/10/1998	11/10/1998
Depth (ft)	0.0-1.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	East Riverbank	East Riverbank	East Riverbank	East Riverbank
Analyte				
4-CHLOROANILINE	R	.33U	.33U	.33U
4-CHLOROPHENYL PHENYL ETHER	.39 U	.33U	.33U	.33U
4-METHYLPHENOL	.39 UJ	.33U	.33U	.33U
4-NITROANILINE	.98 UJ	.83U	.83U	.83U
4-NITROPHENOL	.98 UJ	.83U	.83U	.83U
4-NITROQUINOLINE-1-OXIDE	R	.33U	.33U	.33U
5-NITRO-O-TOLUIDINE	.39 U	.33U	.33U	.33U
7,12-DIMETHYLBENZ(A)ANTHRACENE	.39 U	.33U	.33U	.33U
A,A-DIMETHYLPHENETHYLAMINE	.39 U	.33U	.33U	.33U
ACENAPHTHENE	**.02 J**	.33U	.33U	.33U
ACENAPTHYLENE	**.034 J**	.33U	.33U	.33U
ACETOPHENONE	.39 U	.33U	.33U	.33U
ANILINE	R	.83U	.83U	.83U
ANTHRACENE	**.05 J**	.33U	.33U	.33U
ARAMITE	R	.33U	.33U	.33U
AZOBENZENE	.39 U	.33U	.33U	.33U
BENZO(A)ANTHRACENE	**.21 J**	.33U	.33U	.33U
BENZO(A)PYRENE	**.2 J**	.33U	.33U	.33U
BENZO(B)FLUORANTHENE	**.29 J**	.33U	.33U	.33U
BENZO(GHI)PERYLENE	**.12 J**	.33U	.33U	.33U
BENZO(K)FLUORANTHENE	**.31 J**	.33U	.33U	.33U
BENZYL ALCOHOL	.39 U	.33U	.33U	.33U
BIS(2-CHLOROETHOXY) METHANE	.39 U	.33U	.33U	.33U
BIS(2-CHLOROETHYL) ETHER	.39 U	.33U	.33U	.33U
BIS(2-CHLOROISOPROPYL) ETHER	.39 U	.33U	.33U	.33U
BIS(2-ETHYLHEXYL) PHTHALATE	**.059 J**	.33U	.33U	.33U
BUTYLBENZYLPHTHALATE	.39 U	.33U	.33U	.33U
CHLOROBENZILATE	.39 U	.33U	.33U	.33U
CHRYSENE	**.28 J**	.33U	.33U	.33U
DIALLATE	.39 U	.33U	.33U	.33U
DIBENZO(A,H)ANTHRACENE	**.051 J**	.33U	.33U	.33U
DIBENZOFURAN	**.018 J**	.33U	.33U	.33U
DIETHYL PHTHALATE	.39 U	.33U	.33U	.33U
DIMETHYL PHTHALATE	.39 U	.33U	.33U	.33U
DI-N-BUTYL PHTHALATE	.39 U	.33U	.33U	.33U
DI-N-OCTYL PHTHALATE	.39 U	.33U	.33U	.33U
DINOSEB	.39 U	.33U	.33U	.33U
ETHYL METHANESULFONATE	.39 U	.33U	.33U	.33U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 6
Appendix IX Semivolatile Results
Post-PCB and SVOC Remediation
(Results are presented in parts per million, ppm)

Transect	T110	T110	T110	T116
Location ID	BS000253	BS000254	RB021105	RB021164
Date Collected	04/02/2002	04/02/2002	11/10/1998	11/10/1998
Depth (ft)	0.0-1.0	0.0-1.0	1.0-1.5	0.0-0.5
Exposure Area	East Riverbank	East Riverbank	East Riverbank	East Riverbank
Analyte				
FLUORANTHENE	**.53**	.33U	.33U	.33U
FLUORENE	**.023 J**	.33U	.33U	.33U
HEXACHLOROBUTADIENE	.39 U	.33U	.33U	.33U
HEXACHLOROCYCLOPENTADIENE	**R**	.33U	.33U	.33U
HEXACHLOROETHANE	.39 U	.33U	.33U	.33U
HEXACHLOROPROPENE	.39 U	.33U	.33U	.33U
INDENO(1,2,3-C,D)PYRENE	**.15 J**	.33U	.33U	.33U
ISOPHORONE	.39 U	.33U	.33U	.33U
ISOSAFROLE	.39 U	.33U	.33U	.33U
METHAPYRILENE	.39 U	.33U	.33U	.33U
METHYL METHANESULFONATE	.39 U	.33U	.33U	.33U
NAPHTHALENE	**.034 J**	.33U	.33U	.33U
NITROBENZENE	.39 U	.33U	.33U	.33U
NITROSOMETHYLETHYLAMINE	.39 U	.33U	.33U	.33U
N-NITROSODIETHYLAMINE	.39 U	.33U	.33U	.33U
N-NITROSODIMETHYLAMINE	.39 UJ	.33U	.33U	.33U
N-NITROSO-DI-N-BUTYLAMINE	.39 U	.33U	.33U	.33U
N-NITROSO-DI-N-PROPYLAMINE	.39 UJ	.33U	.33U	.33U
N-NITROSODIPHENYLAMINE	.39 UJ	.33U	.33U	.33U
N-NITROSOMORPHOLINE	.39 U	.33U	.33U	.33U
N-NITROSOPIPERIDINE	.39 U	.33U	.33U	.33U
N-NITROSOPYRROLIDINE	.39 U	.33U	.33U	.33U
O-TOLUIDINE	.39 U	.33U	.33U	.33U
P-DIMETHYLAMINOAZOBENZENE	.39 U	.33U	.33U	.33U
PENTACHLOROETHANE	.39 U	.33U	.33U	.33U
PENTACHLORONITROBENZENE	.39 U	.33U	.33U	.33U
PENTACHLOROPHENOL	.98 U	.83U	.83U	.83U
PHENACETIN	.39 U	.33U	.33U	.33U
PHENANTHRENE	**.3 J**	.33U	.33U	.33U
PHENOL	.39 U	.33U	.33U	.33U
P-PHENYLENEDIAMINE	.39 UJ	.33U	.33U	.33U
PRONAMIDE	.39 U	.33U	.33U	.33U
PYRENE	**.54**	.33U	.33U	.33U
PYRIDINE	.39 U	.33U	.33U	.33U
SAFROLE	.39 U	.33U	.33U	.33U

U - Non-detects UJ - Non-detects at estimated value J - Detect at estimated value R - Rejected value

TABLE 7
Appendix IX Semivolatile Constituents Summary
Post-PCB and SVOC Remediation
(Results are presented in part per million, ppm)

Appendix IX+3 Constituent	Maximum	USEPA Region 9 Residential PRG	Constituent Retained	Arithmetic Average	MCP Method S-2 Standard	Constituent Exceeds Method 1 Standard?
East Riverbank						
BENZO(A)ANTHRACENE	0.21	0.56	no	---	---	---
BENZO(A)PYRENE	0.20	0.056	yes	0.2	0.7	no
BENZO(B)FLUORANTHENE	0.29	0.56	no	---	---	---
DIBENZO(A,H)ANTHRACENE	0.051	0.056	no	---	---	---
INDENO(1,2,3-C,D)PYRENE	0.15	0.56	no	---	---	---
West Riverbank						
BENZO(A)ANTHRACENE	4.7	0.56	yes	0.7	1.0	no
BENZO(A)PYRENE	5.1	0.056	yes	0.7	0.7	no
BENZO(B)FLUORANTHENE	6.3	0.56	yes	0.9	1.0	no

Notes:

All non-detected PCB results were used at 1/2 detection limit

Duplicate sample results: If both sample results were non-detects, the higher result was used at its full detection limit. If both sample results were detects/hits, the results were averaged. If one sample result was a detect/hit and one a non-detect, the result with the detect/hit was used.

Attachment A

Pro UCL Software Printouts
Zone 1 Low Bank 0-3ft depth

Summary Statistics for	Zone 1 Low 0-3
Number of Samples	9
Minimum	0.17
Maximum	22
Mean	3.402222222
Median	0.79
Standard Deviation	7.049666265
Variance	49.69779444
Coefficient of Variation	2.072076956
Skewness	2.882695546

95 % UCL (Assuming Normal Data)

Student's-t	7.771953225

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	9.680155907
Modified-t	8.148287327

95 % Non-parametric UCL

CLT	7.267445266
Jackknife	7.771953225
Standard Bootstrap	6.97391291
Bootstrap-t	37.12859197
Chebyshev (Mean, Std)	13.64514983

Summary Statistics for	ln(Zone 1 Low 0-3)
Minimum	-1.77196
Maximum	3.091042
Mean	0.014833
Standard Deviation	1.498769
Variance	2.24631
Shapiro-Wilk Test Statisitic	0.936861
Shapiro-Wilk 5% Critical Value	0.829

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	3.120484
MLE Standard Deviation	9.072397
MLE Coefficient of Variation	2.907368
MLE Skewness	33.29748
MLE Median	1.014944
MLE 80% Quantile	3.601295
MLE 90% Quantile	6.963986
MLE 95% Quantile	11.94496
MLE 99% Quantile	33.14762
MVU Estimate of Median	0.894434
MVU Estimate of Mean	2.536827
MVU Estimate of Std. Dev.	4.240416
MVU Estimate of SE of Mean	1.308945

UCL Assuming Lognormal Distribution

95% H-UCL	34.40282
95% Chebyshev (MVUE) UCL	8.242387
99% Chebyshev (MVUE) UCL	15.56067

Recommended UCL to use:
95 % Chebyshev (MVUE) UCL

Pro UCL Software Printouts
Zone 1 Mid Bank 0-3ft depth

Summary Statistics for	Zone 1 Mid 0-3
Number of Samples	6
Minimum	0.009
Maximum	0.22
Mean	0.088
Median	0.075
Standard Deviation	0.081296986
Variance	0.0066092
Coefficient of Variation	0.923829391
Skewness	0.807515551
Shapiro-Wilk Test Statisitic	0.912786524
Shapiro-Wilk 5% Critical Value	0.788
Data are Normal at 5% Significance Level	
Recommended UCL to use	Student's-t
95 % UCL (Assuming Normal Data)	
Student's-t	0.154878153
95 % UCL (Adjusted for Skewness)	
Adjusted-CLT	0.154282709
Modified-t	0.156701724
95 % Non-parametric UCL	
CLT	0.142591632
Jackknife	0.154878153
Standard Bootstrap	0.137381612
Bootstrap-t	0.184486947
Chebyshev (Mean, Std)	0.232669048

Pro UCL Software Printouts
Zone 1 High Bank 0-3ft depth

Summary Statistics for	Zone 1 High 0-3
Number of Samples	59
Minimum	0.1
Maximum	11
Mean	0.681525424
Median	0.3
Standard Deviation	1.539150923
Variance	2.368985564
Coefficient of Variation	2.258391058
Skewness	5.913238525
Lilliefors Test Statisitic	0.376567477
Lilliefors 5% Critical Value	0.115347375

Data not Normal at 5% Significance Level
Data not Lognormal: Try Non-parametric UCL

95 % UCL (Assuming Normal Data)

Student's-t	1.016471751

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	1.175951348
Modified-t	1.042181826

95 % Non-parametric UCL

CLT	1.011121823
Jackknife	1.016471751
Standard Bootstrap	1.007550759
Bootstrap-t	2.479670023
Chebyshev (Mean, Std)	1.554963261

Pro UCL Software Printouts
Zone 2a Low Bank 0-3ft depth

Summary Statistics for	Zone 2a low 0-3
Number of Samples	9
Minimum	0.0095
Maximum	0.78
Mean	0.131388889
Median	0.026
Standard Deviation	0.254658077
Variance	0.064850736
Coefficient of Variation	1.938201008
Skewness	2.575229499

95 % UCL (Assuming Normal Data)

Student's-t	0.289238531

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	0.34887342
Modified-t	0.30138303

95 % Non-parametric UCL

CLT	0.271013976
Jackknife	0.289238531
Standard Bootstrap	0.267256521
Bootstrap-t	1.752950856
Chebyshev (Mean, Std)	0.501398496

99 % Non-parametric UCL

Chebyshev (Mean, Std)	0.97599418

Summary Statistics for	ln(2a low)
Minimum	-4.656463
Maximum	-0.248461
Mean	-3.338582
Standard Deviation	1.590591
Variance	2.529979

Shapiro-Wilk Test Statisitic	0.829545
Shapiro-Wilk 5% Critical Value	0.829

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	0.125733
MLE Standard Deviation	0.427368
MLE Coefficient of Variation	3.399006
MLE Skewness	49.46654
MLE Median	0.035487
MLE 80% Quantile	0.136077
MLE 90% Quantile	0.273987
MLE 95% Quantile	0.48575
MLE 99% Quantile	1.434952
MVU Estimate of Median	0.030771
MVU Estimate of Mean	0.098631
MVU Estimate of Std. Dev.	0.176765
MVU Estimate of SE of Mean	0.053782

UCL Assuming Lognormal Distribution

95% H-UCL	1.834418
95% Chebyshev (MVUE) UCL	0.333061
99% Chebyshev (MVUE) UCL	0.633756

Recommended UCL to use:
99 % Chebyshev (MVUE) UCL

Pro UCL Software Printouts
Zone 2a Mid Bank 0-3ft depth

Summary Statistics for	Zone 2a mid 0-3
Number of Samples	9
Minimum	0.023
Maximum	0.31
Mean	0.108889
Median	0.077
Standard Deviation	0.089798
Variance	0.008064
Coefficient of Variation	0.824672
Skewness	1.531304
Shapiro-Wilk Test Statisitic	0.853993
Shapiro-Wilk 5% Critical Value	0.829
Data are Normal at 5% Significance Level	
Recommended UCL to use	Student's-t
95 % UCL (Assuming Normal Data)	
Student's-t	0.16455
95 % UCL (Adjusted for Skewness)	
Adjusted-CLT	0.174449
Modified-t	0.167096
95 % Non-parametric UCL	
CLT	0.158124
Jackknife	0.16455
Standard Bootstrap	0.155783
Bootstrap-t	0.201314
Chebyshev (Mean, Std)	0.239362

Pro UCL Software Printouts
Zone 2a High Bank 0-2ft depth

Summary Statistics for	Zone 2a high 0-2
Number of Samples	53
Minimum	0.07
Maximum	6.6
Mean	0.529056604
Median	0.3
Standard Deviation	1.113647013
Variance	1.24020967
Coefficient of Variation	2.104967607
Skewness	5.003628893

Lilliefors Test Statisitic	0.436867173
Lilliefors 5% Critical Value	0.12170146

Data not Normal at 5% Significance Level
Data not Lognormal: Try Non-parametric UCL

95 % UCL (Assuming Normal Data)

Student's-t	0.785235742

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	0.893012524
Modified-t	0.802758623

95 % Non-parametric UCL

CLT	0.780671807
Jackknife	0.785235742
Standard Bootstrap	0.776271257
Bootstrap-t	3.044348459
Chebyshev (Mean, Std)	1.195842526

Pro UCL Software Printouts
Zone 2b High Bank 0-3ft depth

Summary Statistics for	Zone 2b high 0-3
Number of Samples	12
Minimum	0.0095
Maximum	0.32
Mean	0.140542
Median	0.1075
Standard Deviation	0.112851
Variance	0.012735
Coefficient of Variation	0.802969
Skewness	0.327343
Shapiro-Wilk Test Statisitic	0.893144
Shapiro-Wilk 5% Critical Value	0.859
Data are Normal at 5% Significance Level	
Recommended UCL to use	Student's-t
95 % UCL (Assuming Normal Data)	
Student's-t	0.199046
95 % UCL (Adjusted for Skewness)	
Adjusted-CLT	0.197416
Modified-t	0.19956
95 % Non-parametric UCL	
CLT	0.194126
Jackknife	0.199046
Standard Bootstrap	0.191858
Bootstrap-t	0.202932
Chebyshev (Mean, Std)	0.282542

Pro UCL Software Printouts
Zone 2c Mid Bank 0-3ft depth

Summary Statistics for	Zone 2c mid 0-3
Number of Samples	7
Minimum	0.635
Maximum	22
Mean	10.13785714
Median	8.4
Standard Deviation	9.672933826
Variance	93.56564881
Coefficient of Variation	0.954139883
Skewness	0.182339277
Shapiro-Wilk Test Statisitic	0.821635521
Shapiro-Wilk 5% Critical Value	0.803
Data are Normal at 5% Significance Level	
Recommended UCL to use	Student's-t
95 % UCL (Assuming Normal Data)	
Student's-t	17.24217095
95 % UCL (Adjusted for Skewness)	
Adjusted-CLT	16.42071205
Modified-t	17.28416513
95 % Non-parametric UCL	
CLT	16.15148368
Jackknife	17.24217095
Standard Bootstrap	15.67502917
Bootstrap-t	17.3658069
Chebyshev (Mean, Std)	26.07410212

Pro UCL Software Printouts
Zone 2c Mid Bank 0-1ft depth

Summary Statistics for	Zone 2c mid 0-1
Number of Samples	3
Minimum	18
Maximum	22
Mean	20
Median	20

Too Few Observations To Calculate UCLs

Pro UCL Software Printouts
Zone 2c Mid Bank 1-3ft depth

Summary Statistics for	Zone 2c mid 1-3
Number of Samples	4
Minimum	0.635
Maximum	8.4
Mean	2.74125
Median	0.965
Standard Deviation	3.775761237
Variance	14.25637292
Coefficient of Variation	1.37738668
Skewness	1.989552634

95 % UCL (Assuming Normal Data)

Student's-t	7.184118885

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	7.853227714
Modified-t	7.49712204

95 % Non-parametric UCL

CLT	5.846537284
Jackknife	7.184118885
Standard Bootstrap	5.38559701
Bootstrap-t	235.0680109
Chebyshev (Mean, Std)	10.97033083

99 % Non-parametric UCL

Chebyshev (Mean, Std)

Summary Statistics for	ln(2c mid 1-3)
Minimum	-0.45413028
Maximum	2.128231706
Mean	0.400543922
Standard Deviation	1.168730415
Variance	1.365930783
Shapiro-Wilk Test Statisitic	0.776057872
Shapiro-Wilk 5% Critical Value	0.748

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	2.955031506
MLE Standard Deviation	5.049014804
MLE Coefficient of Variation	1.708616234
MLE Skewness	10.11393071
MLE Median	1.492636354
MLE 80% Quantile	4.007313722
MLE 90% Quantile	6.701708572
MLE 95% Quantile	10.20732351
MLE 99% Quantile	22.62399042
MVU Estimate of Median	1.250521958
MVU Estimate of Mean	2.383663671
MVU Estimate of Std. Dev.	2.546297851
MVU Estimate of SE of Mean	1.260272869

UCL Assuming Lognormal Distribution

95% H-UCL	3414.903903
95% Chebyshev (MVUE) UCL	7.87706575
99% Chebyshev (MVUE) UCL	14.92322039

Recommended UCL to use:

95 % Chebyshev (MVUE) UCL

Pro UCL Software Printouts
Zone 2d Mid Bank 0-3ft depth

Summary Statistics for	Zone 2d mid 0-3
Number of Samples	5
Minimum	0.05
Maximum	100
Mean	28.91
Median	2.4
Standard Deviation	43.56269046
Variance	1897.708
Coefficient of Variation	1.506838134
Skewness	1.486524807
Shapiro-Wilk Test Statisitic	0.771713708
Shapiro-Wilk 5% Critical Value	0.762
Data are Normal at 5% Significance Level	
Recommended UCL to use	Student's-t
95 % UCL (Assuming Normal Data)	
Student's-t	70.44225458
95 % UCL (Adjusted for Skewness)	
Adjusted-CLT	74.79351732
Modified-t	72.60082191
95 % Non-parametric UCL	
CLT	60.95475453
Jackknife	70.44225458
Standard Bootstrap	57.44028466
Bootstrap-t	986.6299472
Chebyshev (Mean, Std)	113.829317

Pro UCL Software Printouts
Zone 2d Mid Bank 0-1ft depth

Summary Statistics for	Zone 2d mid 0-1
Number of Samples	3
Minimum	0.05
Maximum	2.4
Mean	0.85
Median	0.1

Too Few Observations To Calculate UCLs

Pro UCL Software Printouts
Zone 2d Mid Bank 1-3ft depth

Summary Statistics for	Zone 2d mid 1-3
Number of Samples	2
Minimum	42
Maximum	100
Mean	71
Median	71

Too Few Observations To Calculate UCLs

Pro UCL Software Printouts
Zone 3a Bank 0-3ft depth

Summary Statistics for	Zone 3a 0-3ft no results removed
Number of Samples	151
Minimum	0.05
Maximum	700
Mean	9.587199
Median	0.324
Standard Deviation	58.13548
Variance	3379.735
Coefficient of Variation	6.063866
Skewness	11.36033
Lilliefors Test Statisitic	0.434845
Lilliefors 5% Critical Value	0.072102

Data not Normal at 5% Significance Level
Data not Lognormal: Try Non-parametric UCL

95 % UCL (Assuming Normal Data)

Student's-t	17.41736

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	22.04243
Modified-t	18.14632

95 % Non-parametric UCL

CLT	17.369
Jackknife	17.41736
Standard Bootstrap	17.27169
Bootstrap-t	42.95441
Chebyshev (Mean, Std)	30.20914

Pro UCL Software Printouts
Zone 3a Bank 0-3ft depth with 700ppm result removed

Summary Statistics for	Zone 3a 0-3ft 700ppm result removed
Number of Samples	151
Minimum	0.05
Maximum	100
Mean	4.907066
Median	0.258
Standard Deviation	13.45537
Variance	181.047
Coefficient of Variation	2.74204
Skewness	4.652247
Lilliefors Test Statisitic	0.359059
Lilliefors 5% Critical Value	0.072102

Data not Normal at 5% Significance Level
Data not Lognormal: Try Non-parametric UCL

95 % UCL (Assuming Normal Data)

Student's-t	6.719345

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	7.151109
Modified-t	6.788437

95 % Non-parametric UCL

CLT	6.708152
Jackknife	6.719345
Standard Bootstrap	6.685365
Bootstrap-t	7.542287
Chebyshev (Mean, Std)	9.679984

Pro UCL Software Printouts
Zone 3 Mid Bank 0-3ft depth

Summary Statistics for	Zone 3 mid 0-3
Number of Samples	8
Minimum	6.9
Maximum	93
Mean	38.9875
Median	32.5
Standard Deviation	31.20075
Variance	973.487
Coefficient of Variation	0.800276
Skewness	1.040614
Shapiro-Wilk Test Statisitic	0.852065
Shapiro-Wilk 5% Critical Value	0.818
Data are Normal at 5% Significance Level	
Recommended UCL to use	Student's-t
95 % UCL (Assuming Normal Data)	
Student's-t	59.88685
95 % UCL (Adjusted for Skewness)	
Adjusted-CLT	61.46866
Modified-t	60.56326
95 % Non-parametric UCL	
CLT	57.1321
Jackknife	59.88685
Standard Bootstrap	55.9153
Bootstrap-t	82.48927
Chebyshev (Mean, Std)	87.07109

Pro UCL Software Printouts
Zone 3 Mid Bank 0-1ft depth

Summary Statistics for	Zone 3 mid (0-1)
Number of Samples	4
Minimum	6.9
Maximum	34
Mean	24.225
Median	28
Standard Deviation	12.86089
Variance	165.4025
Coefficient of Variation	0.530893
Skewness	-1.04775
Shapiro-Wilk Test Statisitic	0.858159
Shapiro-Wilk 5% Critical Value	0.748
Data are Normal at 5% Significance Level	
Recommended UCL to use	Student's-t
95 % UCL (Assuming Normal Data)	
Student's-t	39.35817
95 % UCL (Adjusted for Skewness)	
Adjusted-CLT	31.20258
Modified-t	38.79672
95 % Non-parametric UCL	
CLT	34.80214
Jackknife	39.35817
Standard Bootstrap	33.52549
Bootstrap-t	38.64521
Chebyshev (Mean, Std)	52.25466

Pro UCL Software Printouts
Zone 3 Mid Bank 1-3ft depth

Summary Statistics for	Zone 3 mid (1-3)
Number of Samples	4
Minimum	11
Maximum	93
Mean	53.75
Median	55.5
Standard Deviation	39.05018
Variance	1524.917
Coefficient of Variation	0.726515
Skewness	-0.127044
Shapiro-Wilk Test Statisitic	0.911304
Shapiro-Wilk 5% Critical Value	0.748
Data are Normal at 5% Significance Level	
Recommended UCL to use	Student's-t
95 % UCL (Assuming Normal Data)	
Student's-t	99.69963
95 % UCL (Adjusted for Skewness)	
Adjusted-CLT	84.54067
Modified-t	99.49292
95 % Non-parametric UCL	
CLT	85.86592
Jackknife	99.69963
Standard Bootstrap	81.92004
Bootstrap-t	164.5054
Chebyshev (Mean, Std)	138.8579

Pro UCL Software Printouts
Zone 3 High Bank 0-3ft depth

Summary Statistics for	Zone 3 high 0-3
Number of Samples	6
Minimum	0.058
Maximum	0.74
Mean	0.248
Median	0.16
Standard Deviation	0.249335116
Variance	0.062168
Coefficient of Variation	1.005383532
Skewness	2.101171723

95 % UCL (Assuming Normal Data)

Student's-t	0.453113039

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	0.508729087
Modified-t	0.467665703

95 % Non-parametric UCL

CLT	0.415430695
Jackknife	0.453113039
Standard Bootstrap	0.403189702
Bootstrap-t	0.955753687
Chebyshev (Mean, Std)	0.691695091

Summary Statistics for	ln(3 high)
Minimum	-2.847312
Maximum	-0.301105
Mean	-1.722648
Standard Deviation	0.850438
Variance	0.723245
Shapiro-Wilk Test Statisitic	0.96226
Shapiro-Wilk 5% Critical Value	0.788

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	0.256398
MLE Standard Deviation	0.264116
MLE Coefficient of Variation	1.030102
MLE Skewness	4.183356
MLE Median	0.178593
MLE 80% Quantile	0.366401
MLE 90% Quantile	0.53268
MLE 95% Quantile	0.723484
MLE 99% Quantile	1.291069
MVU Estimate of Median	0.168058
MVU Estimate of Mean	0.238539
MVU Estimate of Std. Dev.	0.202417
MVU Estimate of SE of Mean	0.082028

UCL Assuming Lognormal Distribution

95% H-UCL	1.078952
95% Chebyshev (MVUE) UCL	0.596089
99% Chebyshev (MVUE) UCL	1.054703

Recommended UCL to use:
H-UCL

Pro UCL Software Printouts
Zone 4 Low Bank 0-3ft depth

Summary Statistics for	Zone 4 low 0-3
Number of Samples	27
Minimum	0.25
Maximum	300
Mean	15.17996296
Median	2.2
Standard Deviation	57.20009964
Variance	3271.851399
Coefficient of Variation	3.7681317
Skewness	5.116827518

95 % UCL (Assuming Normal Data)

Student's-t	33.95568282

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	44.86959945
Modified-t	35.76236828

95 % Non-parametric UCL

CLT	33.28678196
Jackknife	33.95568282
Standard Bootstrap	32.39754395
Bootstrap-t	192.1682753
Chebyshev (Mean, Std)	63.16343874

Summary Statistics for	ln(z4 low 0-3)
Minimum	-1.386294361
Maximum	5.703782475
Mean	0.822032677
Standard Deviation	1.649024152
Variance	2.719280654
Shapiro-Wilk Test Statisitic	0.933509303
Shapiro-Wilk 5% Critical Value	0.923

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	8.861118548
MLE Standard Deviation	33.35526328
MLE Coefficient of Variation	3.76422718
MLE Skewness	64.62954572
MLE Median	2.275119724
MLE 80% Quantile	9.165606779
MLE 90% Quantile	18.93531528
MLE 95% Quantile	34.28395316
MLE 99% Quantile	105.3894835
MVU Estimate of Median	2.16319145
MVU Estimate of Mean	7.974718175
MVU Estimate of Std. Dev.	20.84122041
MVU Estimate of SE of Mean	3.217945983

UCL Assuming Lognormal Distribution

95% H-UCL	26.55899584
95% Chebyshev (MVUE) UCL	22.00141952
99% Chebyshev (MVUE) UCL	39.99287644

Recommended UCL to use:
95 % Chebyshev (MVUE) UCL

Pro UCL Software Printouts
Zone 4 Low Bank 0-1ft depth

Summary Statistics for	Zone 4 low 0-1
Number of Samples	12
Minimum	0.35
Maximum	300
Mean	31.72833333
Median	5.545
Standard Deviation	84.80741197
Variance	7192.297124
Coefficient of Variation	2.672923632
Skewness	3.417430496

95 % UCL (Assuming Normal Data)

Student's-t	75.69480635

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	97.80400782
Modified-t	79.72013185

95 % Non-parametric UCL

CLT	71.99729618
Jackknife	75.69480635
Standard Bootstrap	72.32015511
Bootstrap-t	418.6771298
Chebyshev (Mean, Std)	138.4419865

99 % Non-parametric UCL

Chebyshev (Mean, Std)	275.3190788

Summary Statistics for	ln(z4 low 0-1)
Minimum	-1.049822124
Maximum	5.703782475
Mean	1.558447414
Standard Deviation	1.985639976
Variance	3.942766113

Shapiro-Wilk Test Statisitic	0.93312094
Shapiro-Wilk 5% Critical Value	0.859

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	34.11818307
MLE Standard Deviation	242.6017014
MLE Coefficient of Variation	7.11062781
MLE Skewness	380.8525341
MLE Median	4.751438497
MLE 80% Quantile	25.43975717
MLE 90% Quantile	60.94639957
MLE 95% Quantile	124.5646893
MLE 99% Quantile	481.5673019
MVU Estimate of Median	4.022994211
MVU Estimate of Mean	23.85908908
MVU Estimate of Std. Dev.	63.86748508
MVU Estimate of SE of Mean	14.82243376

UCL Assuming Lognormal Distribution

95% H-UCL	653.1116435
95% Chebyshev (MVUE) UCL	88.46857993
99% Chebyshev (MVUE) UCL	171.3404428

Recommended UCL to use:
99 % Chebyshev (MVUE) UCL

Pro UCL Software Printouts
Zone 4 Low Bank 1-3ft depth

Summary Statistics for	Zone 4 low 1-3
Number of Samples	15
Minimum	0.25
Maximum	6.02
Mean	1.941267
Median	1.6
Standard Deviation	1.641843
Variance	2.695648
Coefficient of Variation	0.845759
Skewness	1.074457
Shapiro-Wilk Test Statisitic	0.891329
Shapiro-Wilk 5% Critical Value	0.881
Data are Normal at 5% Significance Level	
Recommended UCL to use	Student's-t
95 % UCL (Assuming Normal Data)	
Student's-t	2.687925
95 % UCL (Adjusted for Skewness)	
Adjusted-CLT	2.76422
Modified-t	2.707526
95 % Non-parametric UCL	
CLT	2.638556
Jackknife	2.687925
Standard Bootstrap	2.615414
Bootstrap-t	2.886155
Chebyshev (Mean, Std)	3.7891

Pro UCL Software Printouts
Zone 4 Mid Bank 0-3ft depth

Summary Statistics for	Zone 4 mid 0-3
Number of Samples	28
Minimum	0.062
Maximum	42
Mean	6.389357143
Median	1.4
Standard Deviation	11.0732194
Variance	122.6161879
Coefficient of Variation	1.733072538
Skewness	2.179967932

95 % UCL (Assuming Normal Data)

Student's-t	9.953729037

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	10.75263056
Modified-t	10.09741513

95 % Non-parametric UCL

CLT	9.831446546
Jackknife	9.953729037
Standard Bootstrap	9.739751416
Bootstrap-t	11.39690413
Chebyshev (Mean, Std)	15.51097113

Summary Statistics for	ln(z4 mid 0-3)
Minimum	-2.78062089
Maximum	3.737669618
Mean	0.43423736
Standard Deviation	1.779581111
Variance	3.16690893
Shapiro-Wilk Test Statisitic	0.946654108
Shapiro-Wilk 5% Critical Value	0.924

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	7.520945228
MLE Standard Deviation	35.86001148
MLE Coefficient of Variation	4.768019231
MLE Skewness	122.7002421
MLE Median	1.543785258
MLE 80% Quantile	6.944732085
MLE 90% Quantile	15.1954963
MLE 95% Quantile	28.83668287
MLE 99% Quantile	96.88677455
MVU Estimate of Median	1.458742254
MVU Estimate of Mean	6.617757048
MVU Estimate of Std. Dev.	20.23451971
MVU Estimate of SE of Mean	2.89013174

UCL Assuming Lognormal Distribution

95% H-UCL	25.51525534
95% Chebyshev (MVUE) UCL	19.21554924
99% Chebyshev (MVUE) UCL	35.37420477

Recommended UCL to use:
95 % Chebyshev (MVUE) UCL

Pro UCL Software Printouts
Zone 4 Mid Bank 0-1ft depth

Summary Statistics for	Zone 4 mid 0-1
Number of Samples	11
Minimum	0.16
Maximum	20
Mean	2.978181818
Median	1.4
Standard Deviation	5.735288691
Variance	32.89353636
Coefficient of Variation	1.925768486
Skewness	3.133510653

95 % UCL (Assuming Normal Data)

Student's-t	6.112388486

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	7.568270922
Modified-t	6.384685277

95 % Non-parametric UCL

CLT	5.822552528
Jackknife	6.112388486
Standard Bootstrap	5.767884757
Bootstrap-t	17.40491666
Chebyshev (Mean, Std)	10.51582789

Summary Statistics for	ln(z4 mid 0-1)
Minimum	-1.83258146
Maximum	2.995732274
Mean	0.11391272
Standard Deviation	1.38140795
Variance	1.908287925
Shapiro-Wilk Test Statisitic	0.954692505
Shapiro-Wilk 5% Critical Value	0.85

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	2.909719494
MLE Standard Deviation	6.972125626
MLE Coefficient of Variation	2.396150433
MLE Skewness	20.94603742
MLE Median	1.12065431
MLE 80% Quantile	3.600967064
MLE 90% Quantile	6.612897682
MLE 95% Quantile	10.87350176
MLE 99% Quantile	27.85653567
MVU Estimate of Median	1.026889969
MVU Estimate of Mean	2.527444113
MVU Estimate of Std. Dev.	4.039840389
MVU Estimate of SE of Mean	1.132616408

UCL Assuming Lognormal Distribution

95% H-UCL	15.25275089
95% Chebyshev (MVUE) UCL	7.464404579
99% Chebyshev (MVUE) UCL	13.79683509

Recommended UCL to use:
95 % Chebyshev (MVUE) UCL

Pro UCL Software Printouts
Zone 4 Mid Bank 1-3ft depth

Summary Statistics for	Zone 4 mid 1-3
Number of Samples	20
Minimum	0.062
Maximum	42
Mean	8.5571
Median	1.35
Standard Deviation	12.85392841
Variance	165.2234756
Coefficient of Variation	1.502136052
Skewness	1.586276036

95 % UCL (Assuming Normal Data)

Student's-t	13.52701732

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	14.37412472
Modified-t	13.69693298

95 % Non-parametric UCL

CLT	13.28478069
Jackknife	13.52701732
Standard Bootstrap	13.12411499
Bootstrap-t	15.78402662
Chebyshev (Mean, Std)	21.08555967

Summary Statistics for	ln(z4 mid 1-3)
Minimum	-2.780620894
Maximum	3.737669618
Mean	0.632827182
Standard Deviation	1.983508533
Variance	3.9343061

Shapiro-Wilk Test Statisitic	0.920061105
Shapiro-Wilk 5% Critical Value	0.905

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	13.46347188
MLE Standard Deviation	95.32162891
MLE Coefficient of Variation	7.080018421
MLE Skewness	376.1377373
MLE Median	1.882926436
MLE 80% Quantile	10.06326729
MLE 90% Quantile	24.08611772
MLE 95% Quantile	49.19041159
MLE 99% Quantile	189.8943811
MVU Estimate of Median	1.705747648
MVU Estimate of Mean	10.62857225
MVU Estimate of Std. Dev.	35.63489894
MVU Estimate of SE of Mean	5.814154436

UCL Assuming Lognormal Distribution

95% H-UCL	90.30982638
95% Chebyshev (MVUE) UCL	35.97188388
99% Chebyshev (MVUE) UCL	68.47867846

Recommended UCL to use:
95 % Chebyshev (MVUE) UCL

Pro UCL Software Printouts
Zone 4 High Bank 0-3ft depth

Summary Statistics for	Zone 4 high 0-3
Number of Samples	18
Minimum	0.062
Maximum	3.6
Mean	0.658444444
Median	0.385
Standard Deviation	0.798758612
Variance	0.63801532
Coefficient of Variation	1.213099478
Skewness	3.241772672

95 % UCL (Assuming Normal Data)

Student's-t	0.985958783

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	1.121831117
Modified-t	1.009934651

95 % Non-parametric UCL

CLT	0.968119738
Jackknife	0.985958783
Standard Bootstrap	0.956452974
Bootstrap-t	1.411236208
Chebyshev (Mean, Std)	1.479090907

Summary Statistics for	ln(z4 high 0-3)
Minimum	-2.780620894
Maximum	1.280933845
Mean	-0.823843818
Standard Deviation	0.884793469
Variance	0.782859482
Shapiro-Wilk Test Statisitic	0.957829178
Shapiro-Wilk 5% Critical Value	0.897

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	0.64894061
MLE Standard Deviation	0.707231862
MLE Coefficient of Variation	1.089825249
MLE Skewness	4.563881982
MLE Median	0.438741965
MLE 80% Quantile	0.926637036
MLE 90% Quantile	1.367679884
MLE 95% Quantile	1.880695091
MLE 99% Quantile	3.435580098
MVU Estimate of Median	0.429293316
MVU Estimate of Mean	0.630630676
MVU Estimate of Std. Dev.	0.623609426
MVU Estimate of SE of Mean	0.143552879

UCL Assuming Lognormal Distribution

95% H-UCL	1.10713745
95% Chebyshev (MVUE) UCL	1.25636317
99% Chebyshev (MVUE) UCL	2.058963792

Recommended UCL to use:
H-UCL

Pro UCL Software Printouts
Zone 5 Mid Bank 0-3ft depth

Summary Statistics for	Zone 5 mid 0-3
Number of Samples	9
Minimum	0.8
Maximum	65
Mean	11.19444444
Median	5.5
Standard Deviation	20.39026184
Variance	415.7627778
Coefficient of Variation	1.821462596
Skewness	2.880391025

95 % UCL (Assuming Normal Data)

Student's-t	23.83333485

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	29.34698927
Modified-t	24.92096313

95 % Non-parametric UCL

CLT	22.37410983
Jackknife	23.83333485
Standard Bootstrap	22.02924381
Bootstrap-t	71.64667669
Chebyshev (Mean, Std)	40.82080804

Summary Statistics for	ln(5 mid)
Minimum	-0.2231436
Maximum	4.1743873
Mean	1.4818239
Standard Deviation	1.3821103
Variance	1.910229
Shapiro-Wilk Test Statisitic	0.8932544
Shapiro-Wilk 5% Critical Value	0.829

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	11.437969
MLE Standard Deviation	27.438337
MLE Coefficient of Variation	2.3988821
MLE Skewness	21.001337
MLE Median	4.4009654
MLE 80% Quantile	14.149894
MLE 90% Quantile	25.993219
MLE 95% Quantile	42.75112
MLE 99% Quantile	109.57536
MVU Estimate of Median	3.9532835
MVU Estimate of Mean	9.6772549
MVU Estimate of Std. Dev.	14.726794
MVU Estimate of SE of Mean	4.6215275

UCL Assuming Lognormal Distribution

95% H-UCL	90.417791
95% Chebyshev (MVUE) UCL	29.822026
99% Chebyshev (MVUE) UCL	55.660873

Recommended UCL to use:
95 % Chebyshev (MVUE) UCL

Pro UCL Software Printouts
Zone 5 Mid Bank 0-1ft depth

Summary Statistics for	Zone 5 mid 0-1
Number of Samples	3
Minimum	1.2
Maximum	9.3
Mean	5.666667
Median	6.5

Too Few Observations To Calculate UCLs

Pro UCL Software Printouts
Zone 5 Mid Bank 1-3ft depth

Summary Statistics for	Zone 5 mid
Number of Samples	6
Minimum	0.8
Maximum	65
Mean	13.95833
Median	5.425
Standard Deviation	25.11873
Variance	630.9504
Coefficient of Variation	1.799551
Skewness	2.39947

95 % UCL (Assuming Normal Data)

Student's-t	34.622

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	41.5593
Modified-t	36.29621

95 % Non-parametric UCL

CLT	30.82578
Jackknife	34.622
Standard Bootstrap	29.33913
Bootstrap-t	136.1094
Chebyshev (Mean, Std)	58.65743

99 % Non-parametric UCL

Chebyshev (Mean, Std)	115.9911

Summary Statistics for	ln(Zone 5 mid 1-3)
Minimum	-0.223144
Maximum	4.174387
Mean	1.508713
Standard Deviation	1.6048
Variance	2.575383
Shapiro-Wilk Test Statisitic	0.883008
Shapiro-Wilk 5% Critical Value	0.788

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	16.38562
MLE Standard Deviation	57.08303
MLE Coefficient of Variation	3.483726
MLE Skewness	52.73089
MLE Median	4.520908
MLE 80% Quantile	17.545
MLE 90% Quantile	35.54789
MLE 95% Quantile	63.34582
MLE 99% Quantile	188.9491
MVU Estimate of Median	3.622136
MVU Estimate of Mean	11.64986
MVU Estimate of Std. Dev.	18.39708
MVU Estimate of SE of Mean	7.092306

UCL Assuming Lognormal Distribution

95% H-UCL	1802.755
95% Chebyshev (MVUE) UCL	42.5645
99% Chebyshev (MVUE) UCL	82.21741

Recommended UCL to use:
99 % Chebyshev (MVUE) UCL

Pro UCL Software Printouts
Zone 5 High Bank 0-3ft depth

Summary Statistics for	Zone 5 high 0-3
Number of Samples	9
Minimum	0.93
Maximum	13000
Mean	1733.647778
Median	33
Standard Deviation	4297.160505
Variance	18465588.4
Coefficient of Variation	2.478681402
Skewness	2.826687091

95 % UCL (Assuming Normal Data)

Student's-t	4397.239893

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	5531.820566
Modified-t	4622.179303

95 % Non-parametric UCL

CLT	4089.71446
Jackknife	4397.239893
Standard Bootstrap	3942.939634
Bootstrap-t	214524.722
Chebyshev (Mean, Std)	7977.277239

Summary Statistics for	ln(5 high)
Minimum	-0.072571
Maximum	9.4727046
Mean	3.5804385
Standard Deviation	3.34639
Variance	11.198326

Shapiro-Wilk Test Statisitic	0.9180319
Shapiro-Wilk 5% Critical Value	0.829

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	9697.2871
MLE Standard Deviation	2620190.4
MLE Coefficient of Variation	270.19829
MLE Skewness	19727208
MLE Median	35.889275
MLE 80% Quantile	606.76286
MLE 90% Quantile	2645.3261
MLE 95% Quantile	8824.1717
MLE 99% Quantile	86175.535

MVU Estimate of Median	18.41386
MVU Estimate of Mean	1452.1493
MVU Estimate of Std. Dev.	6678.91
MVU Estimate of SE of Mean	1308.1414

UCL Assuming Lognormal Distribution

95% H-UCL	745510383
95% Chebyshev (MVUE) UCL	7154.2055
99% Chebyshev (MVUE) UCL	14467.992

Recommended UCL to use:
Needs further investigation.

Pro UCL Software Printouts
Zone 5 High Bank 0-1ft depth

Summary Statistics for	Zone 5 high 0-1
Number of Samples	3
Minimum	7.7
Maximum	100
Mean	46.9
Median	33

Too Few Observations To Calculate UCLs

Pro UCL Software Printouts
Zone 5 High Bank 1-3ft depth

Summary Statistics for	Zone 5 high 1-3
Number of Samples	6
Minimum	0.93
Maximum	13000
Mean	2577.021667
Median	30.05
Standard Deviation	5194.557276
Variance	26983425.29
Coefficient of Variation	2.015721227
Skewness	2.279609781

95 % UCL (Assuming Normal Data)

Student's-t	6850.272245

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	8174.025677
Modified-t	7179.204567

95 % Non-parametric UCL

CLT	6065.211975
Jackknife	6850.272245
Standard Bootstrap	5794.991676
Bootstrap-t	575473.9667
Chebyshev (Mean, Std)	11820.80409

Summary Statistics for	ln(Zone 5 high 1-3)
Minimum	-0.072570693
Maximum	9.472704636
Mean	3.680174749
Standard Deviation	4.149713511
Variance	17.22012222
Shapiro-Wilk Test Statisitic	0.856233408
Shapiro-Wilk 5% Critical Value	0.788

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	217561.2851
MLE Standard Deviation	1193668237
MLE Coefficient of Variation	5486.583868
MLE Skewness	1.65E+11
MLE Median	39.65332285
MLE 80% Quantile	1321.711367
MLE 90% Quantile	8205.47268
MLE 95% Quantile	36550.6217
MLE 99% Quantile	616866.7872
MVU Estimate of Median	5.298256958
MVU Estimate of Mean	3489.053062
MVU Estimate of Std. Dev.	13239.01182
MVU Estimate of SE of Mean	3366.775

UCL Assuming Lognormal Distribution

95% H-UCL	4.07E+18
95% Chebyshev (MVUE) UCL	18164.48505
99% Chebyshev (MVUE) UCL	36988.04135

Recommended UCL to use:
Needs further investigation.

Pro UCL Software Printouts
Zone 6 Mid Bank 0-3ft depth

Summary Statistics for	Zone 6 mid 0-3
Number of Samples	9
Minimum	0.36
Maximum	84
Mean	30.77333
Median	25
Standard Deviation	29.37666
Variance	862.9884
Coefficient of Variation	0.954614
Skewness	1.009524
Shapiro-Wilk Test Statisitic	0.874873
Shapiro-Wilk 5% Critical Value	0.829
Data are Normal at 5% Significance Level	
Recommended UCL to use	Student's-t
95 % UCL (Assuming Normal Data)	
Student's-t	48.98244
95 % UCL (Adjusted for Skewness)	
Adjusted-CLT	50.40103
Modified-t	49.53163
95 % Non-parametric UCL	
CLT	46.8801
Jackknife	48.98244
Standard Bootstrap	46.13182
Bootstrap-t	63.02175
Chebyshev (Mean, Std)	73.45664

Pro UCL Software Printouts
Zone 6 Mid Bank 0-1ft depth

Summary Statistics for	Zone 6 mid 0-1
Number of Samples	3
Minimum	25
Maximum	84
Mean	60.33333
Median	72

Too Few Observations To Calculate UCLs

Pro UCL Software Printouts
Zone 6 Mid Bank 1-3ft depth

Summary Statistics for	Zone 6 mid 1-3
Number of Samples	6
Minimum	0.36
Maximum	33
Mean	15.99333
Median	13.5
Standard Deviation	14.33296
Variance	205.4339
Coefficient of Variation	0.896184
Skewness	0.355555
Shapiro-Wilk Test Statisitic	0.873773
Shapiro-Wilk 5% Critical Value	0.788
Data are Normal at 5% Significance Level	
Recommended UCL to use	Student's-t
95 % UCL (Assuming Normal Data)	
Student's-t	27.7842
95 % UCL (Adjusted for Skewness)	
Adjusted-CLT	26.5256
Modified-t	27.92576
95 % Non-parametric UCL	
CLT	25.61804
Jackknife	27.7842
Standard Bootstrap	24.63571
Bootstrap-t	31.8913
Chebyshev (Mean, Std)	41.49903

Pro UCL Software Printouts
Zone 6 High Bank 0-3ft depth

Summary Statistics for	Zone 6 high 0-3
Number of Samples	9
Minimum	0.049
Maximum	0.92
Mean	0.275777778
Median	0.18
Standard Deviation	0.263350896
Variance	0.069353694
Coefficient of Variation	0.954938785
Skewness	2.14816426

95 % UCL (Assuming Normal Data)

Student's-t	0.439015658

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	0.487333566
Modified-t	0.449491972

95 % Non-parametric UCL

CLT	0.420169003
Jackknife	0.439015658
Standard Bootstrap	0.411562509
Bootstrap-t	0.599028696
Chebyshev (Mean, Std)	0.658417759

Summary Statistics for	ln(6 high)
Minimum	-3.015935
Maximum	-0.0833816
Mean	-1.6176053
Standard Deviation	0.8545681
Variance	0.7302867
Shapiro-Wilk Test Statisitic	0.9806436
Shapiro-Wilk 5% Critical Value	0.829

Data are Lognormal at 5% Significance Level

Estimates Assuming Lognormal Distribution

MLE Mean	0.2858003
MLE Standard Deviation	0.2964171
MLE Coefficient of Variation	1.0371478
MLE Skewness	4.2270779
MLE Median	0.1983732
MLE 80% Quantile	0.4084053
MLE 90% Quantile	0.5948266
MLE 95% Quantile	0.8090935
MLE 99% Quantile	1.4479085
MVU Estimate of Median	0.1904543
MVU Estimate of Mean	0.2717505
MVU Estimate of Std. Dev.	0.2424322
MVU Estimate of SE of Mean	0.0798126

UCL Assuming Lognormal Distribution

95% H-UCL	0.7020745
95% Chebyshev (MVUE) UCL	0.6196457
99% Chebyshev (MVUE) UCL	1.0658762

Recommended UCL to use:
H-UCL

Pro UCL Software Printouts
Zone 7 Mid/High Bank 0-3ft depth

Summary Statistics for	7 mid& high 0-3
Number of Samples	77
Minimum	0.009
Maximum	37
Mean	1.360987013
Median	0.2
Standard Deviation	5.266919602
Variance	27.7404421
Coefficient of Variation	3.869926423
Skewness	5.632177117

Lilliefors Test Statisitic	0.436412512
Lilliefors 5% Critical Value	0.100969071

Data not Normal at 5% Significance Level
Data not Lognormal: Try Non-parametric UCL

95 % UCL (Assuming Normal Data)

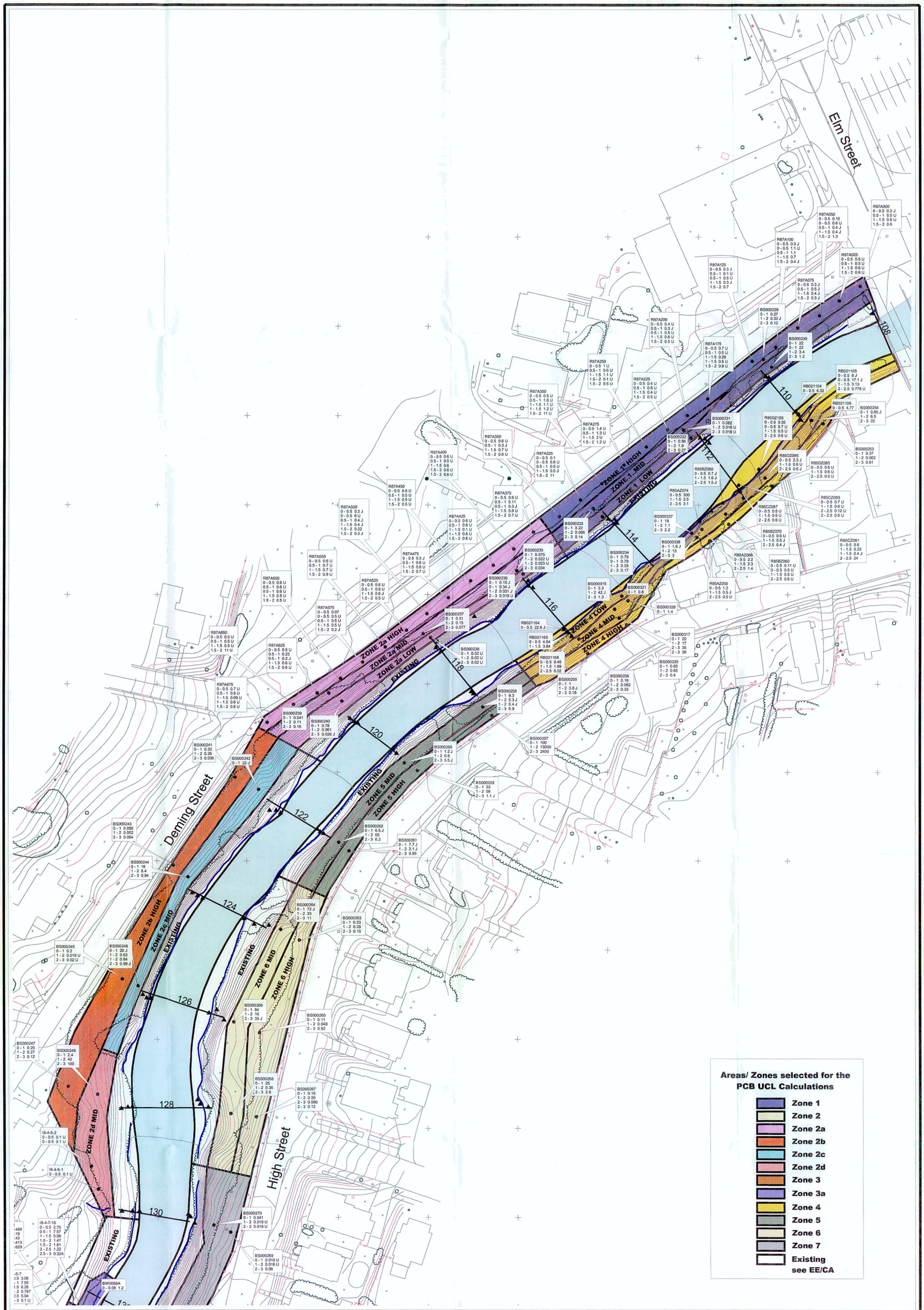
Student's-t	2.360445979

95 % UCL (Adjusted for Skewness)

Adjusted-CLT	2.759907867
Modified-t	2.424654256

95 % Non-parametric UCL

CLT	2.348263022
Jackknife	2.360445979
Standard Bootstrap	2.330400668
Bootstrap-t	4.090699228
Chebyshev (Mean, Std)	3.977290542



Areas/ Zones selected for the PCB UCL Calculations

- Zone 1
- Zone 2
- Zone 2a
- Zone 2b
- Zone 2c
- Zone 2d
- Zone 3
- Zone 3a
- Zone 4
- Zone 5
- Zone 6
- Zone 7
- Existing see EE/CA

LEGEND:

- Sample Locations used in 2003 Data Evaluation for the Limit of Remediation
- Sample Locations used in Limit of Remediation established by the EE/CA
- Roads
- Surface Water
- Contours

N

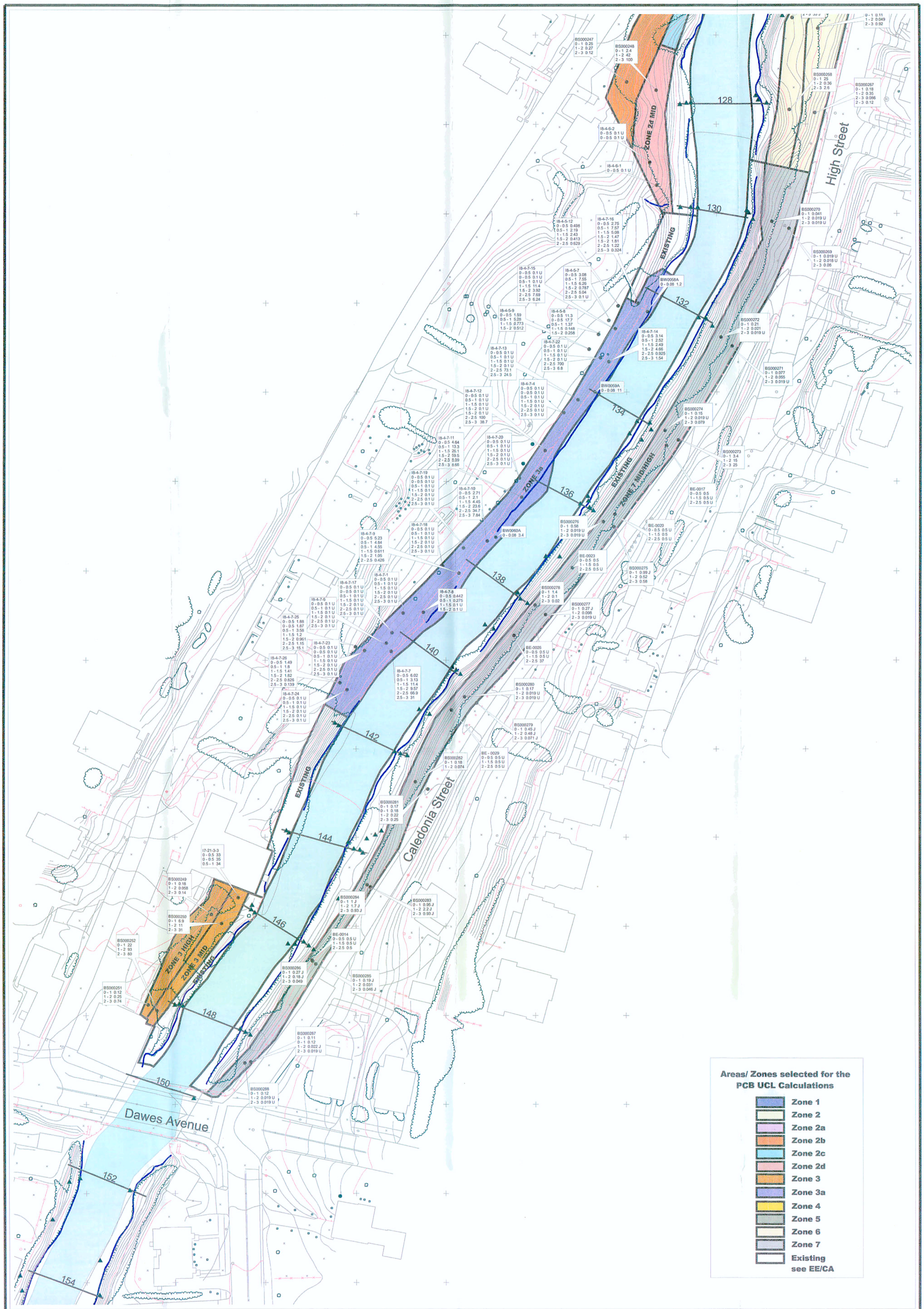
50 0 50 100 Feet

WESTON SOLUTIONS

1.5 Mile Reach Removal Action
Pittsfield, Massachusetts

Figure 1
PCB Data and Exposure Areas/Zones
Elm Street Bridge to Dawes Avenue Bridge
(map 1 of 2)

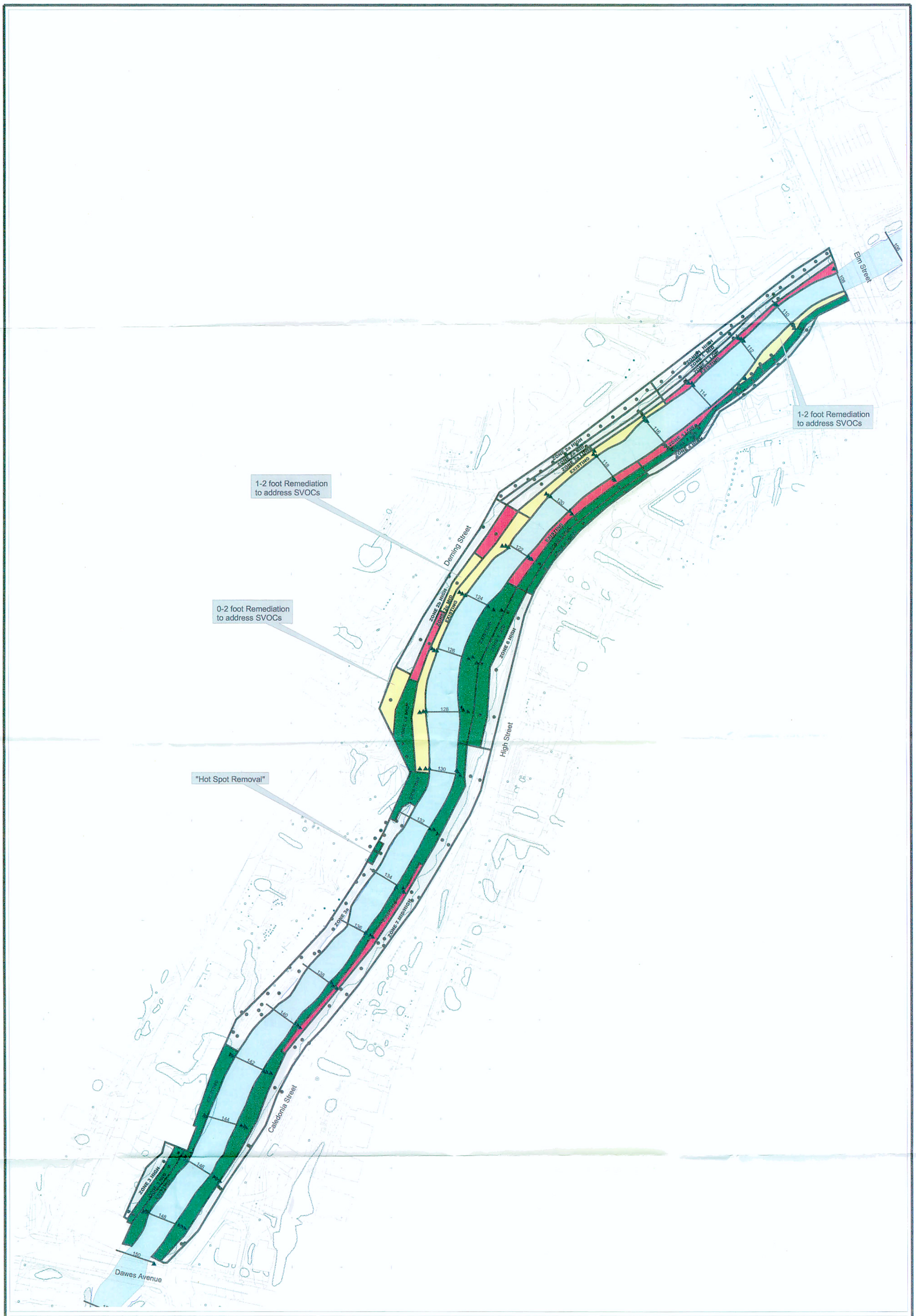
| c:\1.5 mile\ucl calcs\limit of work elm to dawes.apr | Elm to Dawes Map 1 | Full Name of Plot File | 1:05 PM, 10/24/2003 |



1.5 Mile Reach Removal Action
Pittsfield, Massachusetts

Figure 1
PCB Data and Exposure Areas/Zones
Elm Street Bridge to Dawes Avenue Bridge
(map 2 of 2)

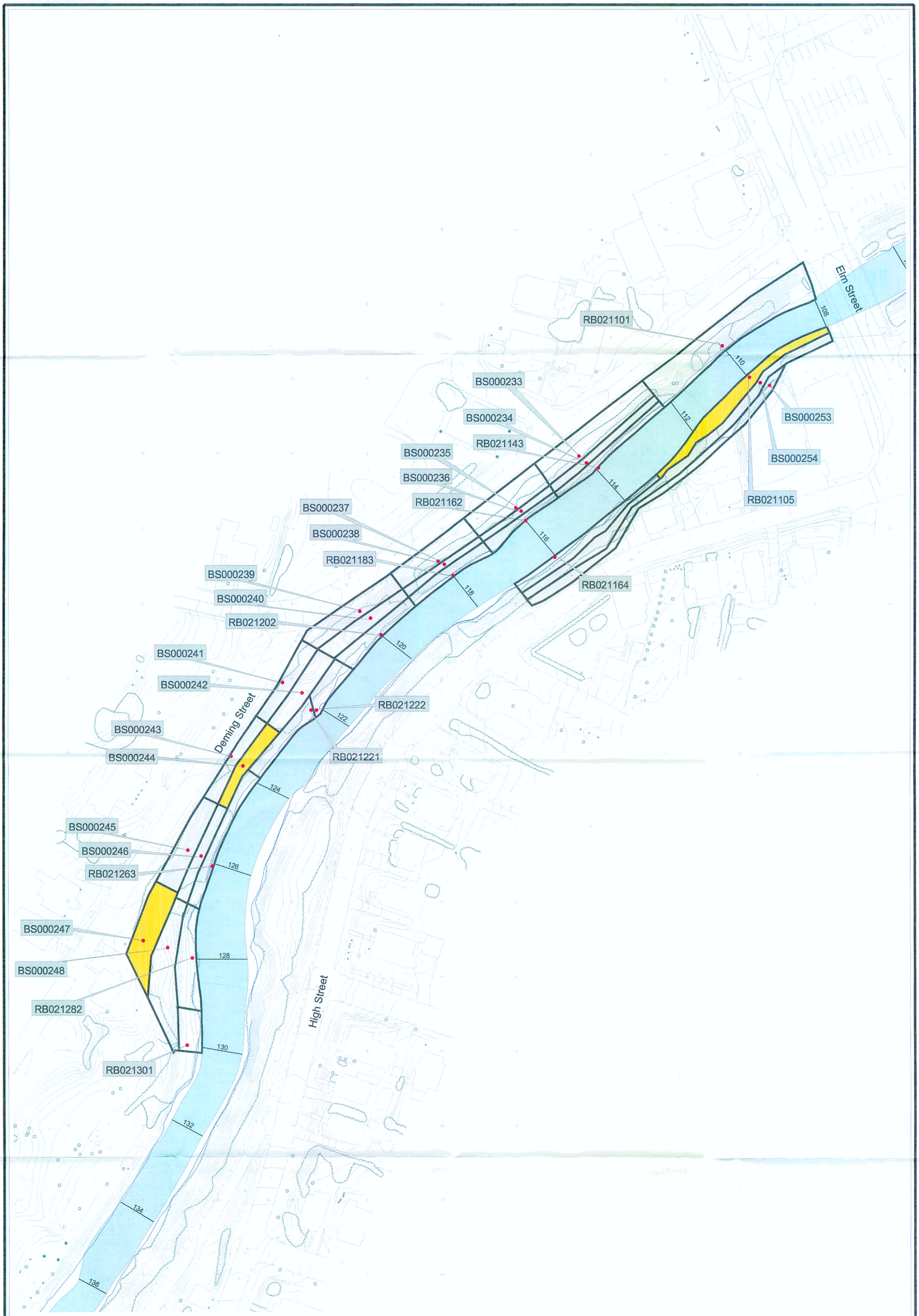
| c:\1.5 mile\ucl calcs\limit of work elm to dawes.apr | Elm to Dawes Map 2 | Full Name of Plot File | 1:04 PM, 10/24/2003 |



1.5 Mile Reach Removal Action
Pittsfield, Massachusetts

Figure 2
Final Remediation Limits
Elm Street Bridge to Dawes Avenue Bridge

| c:\1.5 mile\ucl calcs\limit of work elm to dawes.apr | Limit of remediation Elm to Dawes | Full Name of Plot File | 1:56 PM, 10/24/2003 |



| c:\1.5 mile\ucl calcs\limit of work elm to dawes.apr | SVOC Sample Locations and Exposure Areas | Full Name of Plot File | 4:15 PM, 10/24/2003 |